

MIND & BRAIN.

GEORGE DUNCAN.

FROM THE FUND BEQUEATHED BY







THE VARIOUS THEORIES

OF THE RELATION OF

MIND AND BRAIN

REVIEWED.

BY

GEORGE DUNCAN,

Author of "Iconology," "Marston Brothers," &c., &c.

"Men are governed by custom; not one of a thousand thinks for himself; and the few who are emancipated dare not act up to their freedom for fear of being thought whimsical."—*Lord Kames*.

LONDON :

TRÜBNER & CO., 60 PATERNOSTER ROW.

1869.

22356 Bi. 30

19. C. 20.



TO
GEORGE HENRY LEWES
THIS LITTLE TREATISE
IS RESPECTFULLY
DEDICATED
BY AN ADMIRER OF HIS
WRITINGS.

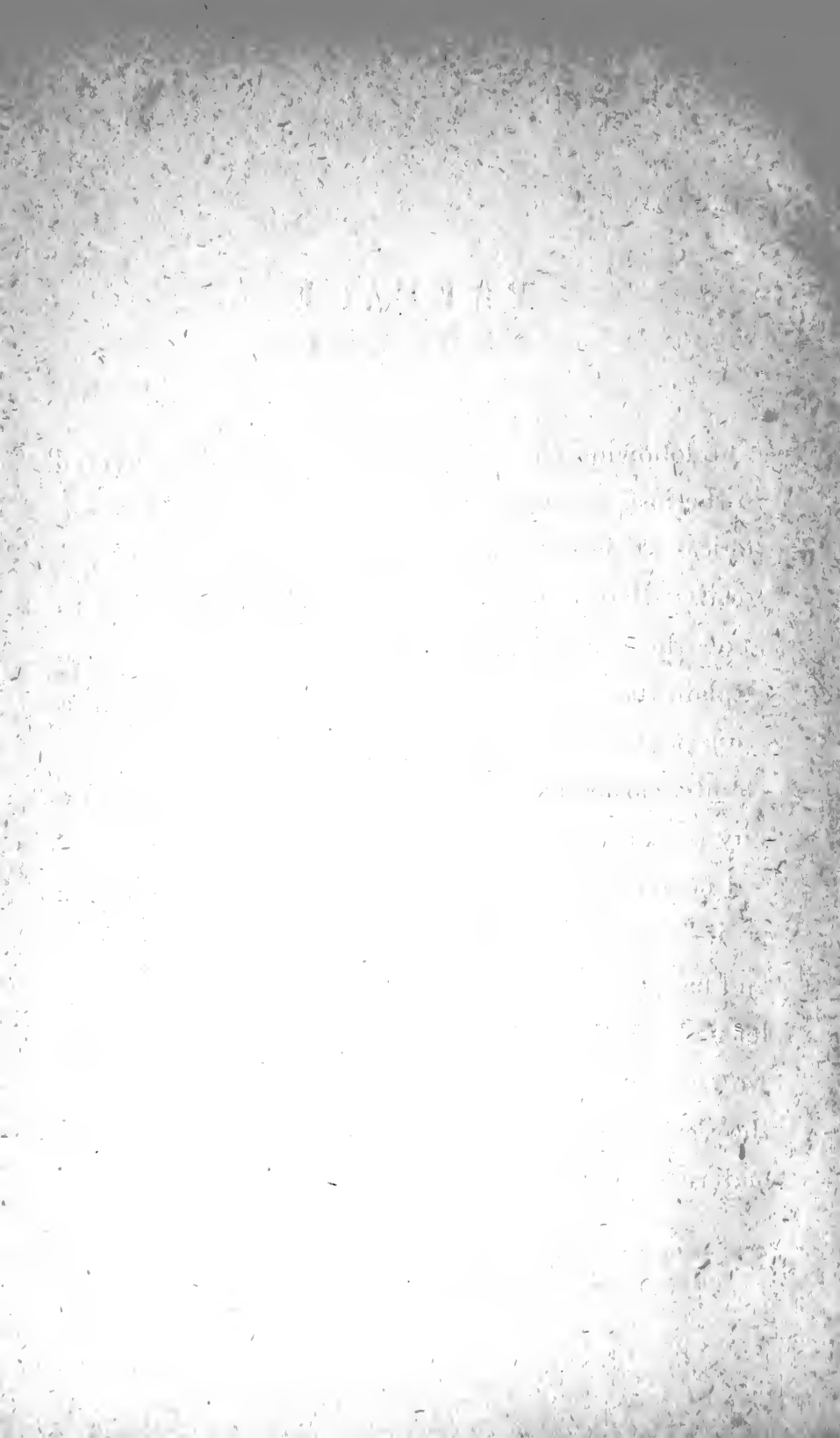
P R E F A C E.

THE following short treatise was originally delivered in the form of two lectures to the "Glasgow Psychological Society." It is a work, therefore, more suggestive than exhaustive—its principal aim being to show the insufficiency of any physiological theory to explain the co-relation of mind and brain. This is a subject of vast importance, and ought to be studied calmly, earnestly, and perseveringly, unhampered by any preconceptions.

I need scarcely add that the subject is as difficult as it is vast—is even mysterious at every step—and has puzzled the greatest minds in all ages; yet let us hope that it is not insolvable, but that ere long we shall be able to explain in a satisfactory manner the various phases of mental phenomena, and their material correlate, if such relation there is.

GEORGE DUNCAN.

194 EGLINTON STREET, GLASGOW.



CONTENTS.

SECTION I.

THE PHYSIOLOGICAL ARGUMENT.

CHAPTER I.		PAGE
Introductory,		3
CHAPTER II.		
The Materialist Theory of Mind and Brain Refuted,		10
CHAPTER III.		
The Popular Theory of Mind and Brain Untenable—Arguments from Phrenology Unsatisfactory,		23
CHAPTER IV.		
George H. Lewes' Theory of Mind and the Nervous System, . .		33
CHAPTER V.		
The Brain is not the Organ of Mind—Cases of Diseased Brain without Impaired Intellect,		42
CHAPTER VI.		
Insufficiency of Modern Physiological Theories of Mind and Brain —Conclusion,		50

SECTION II.

THE PSYCHOLOGICAL ARGUMENT.

CHAPTER I.

PAGE

Arguments from the Mind in its Normal Condition, 57

CHAPTER II.

Abnormal Conditions—Dreaming—Remarkable Cases of its Prophetic Power, 64

CHAPTER III.

Somnambulism—Illustrative Cases, 74

CHAPTER IV.

Trance and Clairvoyance, 79

CHAPTER V.

Mesmerism — Brain-waves — Modern Spiritualism — Abstraction, &c., 84

CHAPTER VI.

Insanity and Spectral Illusions, 93

CHAPTER VII.

General Summary—Conclusion, 103

SECTION I.

THE PHYSIOLOGICAL ARGUMENT.

THEORY

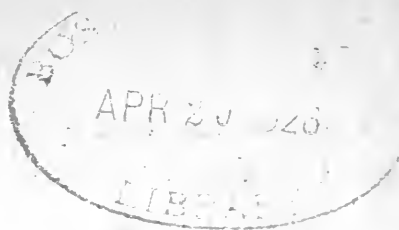
The following table shows the results of the experiment.

TABLE I

10

11

12



MIND AND BRAIN.

CHAPTER I.

INTRODUCTORY.

PERHAPS there is no subject in all the wide domain of psychology which is more abstruse and perplexing than the one we are about to consider. It has engaged the attention of scholars in all ages, but all their endeavours to show the connection betwixt mind and matter have proved abortive. The brightest luminaries that ever adorned the firmament of Grecian or Roman learning have wrestled mightily to solve this scientific and most difficult problem, but they were unable. Men of science have conjectured in vain, and the dreams of the *savans* of our own day—for dreams they are—are as unsatisfactory as those of the early Greek sages, and man is now almost as ignorant of the connection of soul and body, mind and brain, as ever he was. The subject

seems too vast and too intricate for "human ken." Chemistry, which deals in intricacies, is unable to throw any light upon this dark enigma. Physiology has but contradictory and false theories to offer. Anatomy is in a like sad condition; and psychology—which is *the* science to help us in our investigations of this troubled theme—has itself been left unstudied, if not altogether neglected. And although we do not adopt the theories of our fathers regarding this subject, yet their phraseology is still popular with us. Do we not still speak of "lily-livered boys," "splenetic fellows," "fellows of the same kidney," "warm-hearted, clear-headed men"? And what are these terms but the expression or perpetuation of our fathers' theories, which placed these affections in those parts of the body? And though they are but theories, it would be difficult to disprove them. And what are many of the "ologies" of our own day but our fathers' theories in another garb? Take phrenology: it confines to the head of man what our Father located throughout the body and head. Then we have the phreno-mesmerist, who is not content with the knowledge of the locality of our faculties, sentiments, &c., but must, by his magic touch, cause the musician to sing, the risible to laugh, the religionist to pray, the swimmer to swim, &c. We have then the physiognomist, who finds in the countenance what the phrenologist finds in the head. We have another physiognomy, called "Symbols of the Human Form," which lays down as its fundamental

principle the arrogant assumption that the Almighty fashioned the human body on purpose to represent the various passions and emotions of the soul, with her intellectual endowments ; and hence these men, from the various lines on our skin, *presume to tell us* of our spiritual and mental nature. And the philosopher of the *boudoir* describes the soul of her correspondent “oozing out of the tips of her thumbs and two digits, thus giving evidence under her own hand of her virtues and her vices.”* We have those also who—tampering with man’s credulity—tell us his character from the formation of his *nose*. The “snub,” say they, indicates *meanness of intellect*; a large “snub” nose, *sensuousness*; a large “snub,” with wide nostrils, evinces an *empty and inflated mind*; a Roman nose, *strength of will*; a Greek, straight one, *a taste for the fine arts*; a Jewish, or hawk-like nose, *cunning and shrewdness*, &c. We have men, too, who find a man’s moral and intellectual power peering through his eyes. These men assert that a large eye-ball indicates *brute force*; a small one, *meanness and feebleness*, and so on. They derive like knowledge from the colour of the eye. A pure, white eye, it seems, argues *purity of mind*; a dirty yellowish, *impurity*; dark-blue eyes, *effeminacy*; light-blue, grey, and green, *hardiness and activity*; hazel eye, *masculine vigour*. They have a mental quality for almost every possible colour. We have those who have studied the human hand, and

* *Good Words*. 1863.

from it they profess to discern our mental and moral condition. They divide the hand into four groups, viz., 1. The *elemental* hand, which indicates a *rough, unfinished mind*; 2. The *motor* hand, strong, large-jointed, and broad tipped, symbolises *resolution and strength of will*; 3. The *sensitive*, or proper female hand, indicates in man *feeling, fancy, and wit*; 4. The *psychical* hand indicates a *rare mind, with peculiar purity and grandeur of feeling*. We have men, also, who profess to find the like knowledge in their observations of the "foot," the "ear," the "hair," and other portions of the body; so that, according to these various theorists, the human head, face, trunk, eyes, ears, nose, mouth, feet, and hair—all and each of them—have the impress of man's moral, spiritual, and intellectual nature. Now it cannot be said that these psychometries are taught by men of no standing—for the reverse is the fact. Their expounders have been men well known in the scientific and literary world. But whether their teachings are false or otherwise is quite another question; for it may indeed be asked, does the mind influence those parts to such an extent as to enable man to describe the state and condition of the influencing mind? and, if so, *how* does it so affect those parts of the body? We may ask these questions, but we need hardly expect a satisfactory answer to them. It may further be asked, have these men more abundant proofs of their theories than our fathers had of theirs?

Had our early philosophers any ground for associating cowardice with a pale liver—irritability with the spleen—sourness of temper with the gall—love, its associates and opposites, with the heart, and intellectual endowment with the head? I confess my inability to answer this question. I am satisfied, however, of the possibility of there being “stammerings of truth” in all such theories, and our duty as psychologists is to study every subject that will throw any light upon our science. We ought to study, in some degree at least, the various modern psychometries, as well as phrenology, mesmerism, animal magnetism, and spiritualism. I would give a very prominent place to the latter subject, which is likely to upset some of the hasty conclusions of psychologists, and equally hasty and false theories of physiologists. As the various psychometries profess to be able to aid us in our investigations, let us see whether they are equal to their profession or not; for I take it that psychological science is not yet in a position to cast aside any assistance that other branches of study can afford it. Physiology cannot, in its present state, speak authoritatively on the question of the truth or falsehood of these psychometries. It cannot tell us, for instance, whether the brain is *the* organ of the mind, or only *one* of these organs; for the most important branch of the science, viz., cerebral physiology, is, as yet, in the womb of Nature. There is not less than three fundamentally distinct theories regarding that subject.

Now, if the physiologist would prove to us which of these theories is the correct one—and I believe he cannot, for they seem to me all false alike—then we could listen with a degree of patience to his charges against those modern psychometries as taught by Dr Carus of Dresden, Lavater, and others. These theories may be false, but a number of them have still to be proved so, and I scarcely believe that the physiologist is the one to accomplish that task, his science being almost theoretical throughout; and it is a pity that his science is in that condition, because physiology is an indispensable branch of study to every psychologist who would deserve the name;—indispensable, were it only to tell us how certain states of the body affect the mind, and, *vice versa*, how certain states of mind affect our bodily condition. But the nature of this connection and reciprocal influence is as yet hid in the unknown. Theories without number, no doubt, have been advanced. But what then? We know no more of the nature of the connection now than was known centuries ago. Professor Tyndal recently observed “that the connection of soul and body is as insoluble in its modern form as it was in the pre-scientific ages;” and I think so too. No doubt we have men who profess to have a knowledge of this subject; but profession is all they have—they never bequeath the knowledge to any one. Let it here be distinctly understood that I am not making light of physiology;—I only

object to the dogmatism of certain physiologists who speak of their science as if it were as susceptible of proof as a problem in Euclid. Physiology is the handmaiden of psychology, therefore both ought to be studied; and let our endeavour be to upraise both from the domain of theory to demonstrable fact—from mere conjecture to recognised truth. It may here be asked, what do physiologists say or conjecture regarding the connection of soul and body, mind and brain? There are, as we have already observed, three schools of physiologists, each of which would yield a different answer from the others. These schools are—first, the *Materialistic*, which asserts that the brain *is* the mind; the second, the popular school, asserts that the brain is the *organ* of the mind; and the third, which is the rising school, asserts that the mind is co-extensive with the nervous system, the brain being therefore only *one* of the organs of the mind. We will now examine these three schools at some length.

CHAPTER II.

THE MATERIALIST THEORY OF MIND AND BRAIN REFUTED.

THE human brain, as most of you are aware, consists of three great divisions—the *cerebrum*, or brain proper; the *cerebellum*, or smaller brain; and the *medulla oblongata*. The surface of these is marked with convolutions, like folds of velvet. The various speculations which have been indulged in regarding the province of each of these divisions of the brain I shall examine anon. In the meantime, I shall confine myself to the materialist's theories.

Not many years ago it was held by this school that the larger a man's brain was he had the greater chance of becoming a scholar; and it was not until the accumulation of facts contradictory to this that the theory was held untenable—the heaviest brain on record being that of an idiot. Our theorist then asserted—gratuitously asserted—that mind depended upon the *quality* of the brain; and on being asked wherein the quality spoken

of lay, he made another equally unwarranted averment, which was, that the *number* and *depth* of the convolutions indicated the mental endowments of the individual. But this assertion has been abundantly disproved by M. Camille Dareste and others. Our theorist is not put out of court at this, so he makes another assertion equally groundless as those already made: he asserts that the quality of the mind is evinced by the amount of the grey matter of the brain. This assertion has likewise been disproved by an elaborate series of measurements conducted by M. Baillarger. Having been driven from these strongholds also, he takes up the general position that brain is our only mind, and that it is as much the function of the brain to think as it is of the stomach to digest, the glands to secrete, the muscles to move, &c. This, of course, is pure assumption; yet the late Professor Lawrence and nearly all the modern materialists accept it. Let us look at this for a moment. If you examine a man's stomach sometime after food has entered it, what do you see? Why, the result of digestion to be sure. Take out a man's brain, do you there see the result of thought? I think not. In the one case you have the visible results of digestion, in the other you have nothing. Why it has been asserted that we have the "same sort of evidence" for the one as we have for the other I cannot define. Plainly we have not the *same* evidence—equally plain it is that we have no evidence at all. These men further assert—for they

are rich in assertion—that thought is the vibration of the particles of the brain. To this Dr James M'Cann has replied—"If thought be matter, it must be the result either of the matter in its *essence* as matter, or of the *form* in which the matter is arranged. Thought cannot be the result of matter as such, because, in point of fact, as you know, all matter cannot think. The platform on which I stand cannot think or feel. If, when the matter becomes brain, it thinks, it is a quality superadded to the matter; and if it be superadded to it as such, it belongs to every particle of it. Well, suppose one thought only to be in the mind; I now take away a particle of brain; either I take away a portion of the thought or I do not. If I do, then the one particle is thinking by itself, and organization is not necessary. If I do not, in that case I may subtract particle by particle, till only one cell be left, which will contain the entire thought, or be as useful as the complete brain." I doubt the materialist will not easily answer that argument. We have been told by materialists that they would believe in spirit did they know what was its essence; but they may, on the same grounds, give up their belief in matter, for they know as little of its essence as I know of the essence of spirit—perhaps less. In this life we know nothing of essences; all that we know is of properties, qualities, &c.—of matter and spirit. Materialists always call attention to the fact that diseases of the brain are often followed by epilepsy,

paralysis, insanity, &c., which no doubt they are; but what then? Does that prove his assertion that mind *is* brain? By no means. Take epilepsy, for instance. If it follows that brain *is* the mind, simply because epilepsy is often accompanied with disease of that region, then I assert that the spine also must think; and this upsets his theory at once, because epilepsy is often accompanied with disease of the spine, the brain being sound and entire. "M. Esquirol, some years ago, presented to the Faculty of Medicine, at Paris, a memoir on epilepsy, in which he states that he had examined the bodies of fifteen patients who died of this disease, and found the spinal cord affected in all of them."* And if any one would read "Abercromby on the Brain," he would there find many cases of a like nature. And now the materialist must yield up his theory, or this portion of his defence of it. Paralysis is not the result of brain disease any more than is epilepsy. I could mention numerous cases of this nature, where the brain was not affected in the least. Apoplexy is another disease generally associated with the pathology of the brain, but without much authority. Delirium of the mind, also, is generally associated with disease of the brain; but it is not the result of diseased brain alone—it is the result of disease of the spine. Dr Abercromby in his valuable works mentions numerous cases where delirium was not accompanied with any disease of the

* Abercromby on the Brain.

brain whatever, but of disease of the spinal cord. And insanity, is it *always* accompanied with disease of the brain? If not—and we know that it is not—then the materialist's theory is good for nothing. I never could discover the authority that warrants the materialist's assertion that insanity is *always* accompanied with brain disease. This assertion, like all the others, merely proves his power of assertion. It likewise shows that he has nothing but assertion to offer us in defence of his position. I will prove anon that the brain has been extensively diseased without insanity ensuing. I therefore argue that the materialist cannot make out a case in defence of his theory. But we have yet one argument—and, at first sight, a pretty strong one too—which is put forth in defence of materialism—that is, that fractures in the skull often cause unconsciousness. We admit the fact. But what does it amount to? Positively nothing. Let us state the strongest case on record in the materialist's favour. "A sailor fell from the yard-arm on the deck, and was taken up insensible. For months he remained in that state, but was otherwise healthy. On examining his head an obvious depression on the skull was at once observed, and thirteen months and a few days after the accident he was carried into the operating theatre and there trepanned. The depressed portion of the bone was raised from off the brain; his fingers, which had been moving all along to the motion of his heart, ceased immediately when the bone

was upraised. His consciousness also, about the same time, returned to him, and in a few days he could give an account of himself. But from the time of the accident to the day of operation his mind had remained in a perfect state of oblivion. It is argued from this that the brain must be the mind, because if the brain is pressed in any way, mental operation to all appearance ceases. If this is thought a legitimate deduction, then I assert that the heart must think, because if we suspend the action of the heart, all mental manifestation likewise ceases. I therefore argue that either the heart and brain must be the mind—or neither of them is. The materialist, if he would be logical, must accept either of these positions, and either of them upsets his theory, that the brain alone is the mind of man. So much for his deduction. Let us look at this seaman's case again. We read—"That if he wanted food he had the power of moving his lips and tongue; and this action of his mouth was the signal to his attendants for supplying this want." This statement plainly proves that the man was still in possession of sensation and volition—so that all indications of mind were not gone. The man felt the sensation of hunger, and expressed his want to those around him. To the materialist, who denies man's dual nature, this feature in the case must be a perplexing one, to say the least of it. It is further asked, How do we account for the man's loss of memory, if his mind was still entire? This question, like some of the others, seems perplex-

ing at first sight; but it really is not so. It amounts to this: that because the man does not *remember* any thought or feeling during his illness, it therefore follows he had none. This is very immaterial logic—"That which I do not remember now, never had any existence in my mind." Absurd. We only require to apply this argument to see its weakness. The somnambulist—who not only dreams but often *acts* the dream, and that, too, occasionally, in a very extraordinary manner—seldom remembers the dream when awake. Take an instance—"A female servant, in the town of Chelmsford, surprised the family at four o'clock one morning by walking down a flight of stairs in her sleep, and rapping at the bedroom door of her master, who inquired what she wanted, when, in her usual tone of voice, she requested some cotton, saying that she had torn her gown, but hoped that her mistress would forgive her, at the same time bursting into tears. Her fellow-servant, with whom she had been conversing for some time, observed her get out of bed, and quickly followed her, but not before she had related her pitiful story. She then returned to her room, and a light having been procured, she was found groping to find her cotton box. Another person went to her, when, perceiving a difference in the voice, she called out, 'That is a different voice—that is my mistress.' . . . Upon inquiry as to what was the matter, she only said that she wanted some cotton, but that her fellow-servant had been to her

master and mistress making a fuss about it. It was now thought prudent that she should be allowed to remain quiet for some short time, and she was persuaded to lie down with her fellow-servant until the usual hour of rising, thinking that she might then awake in her accustomed manner. This failing in effect, her mistress went up to her room, and rather angrily desired her to get up, and go to her work, as it was now six o'clock. This she refused, telling her mistress that if she did not please her she might look out for another servant, at the same time saying that she would not get up at two o'clock (pointing to the window) to injure her health for any one. For the sake of a joke she was told to pack up her things and start off immediately; but to this she made no reply. She rebuked her fellow-servant for not remaining longer in bed, and shortly after this became quiet. She was afterwards shaken violently and awoke. She then rose, and seeing her cotton box disturbed, demanded to know why it had been meddled with, not knowing that she alone was the cause of it. In the course of the day several questions were put to her, in order to try her recollection, but the real fact of her walking was not made known to her, and she is still quite unconscious of what has transpired."*

Now, to apply the materialist's logic to this case, we would have to assert that the young lady did none of those things which she did do, simply because she

* Philosophy of Sleep, p. 102.

had no recollection of them. Let us take another case of a like nature:—"Dr Blacklock, on one occasion, rose from bed, to which he had retired at an early hour, came into the room where his family were assembled, conversed with them, and afterwards entertained them with a pleasant song, without any one suspecting that he was asleep, and without his retaining after he awoke the least recollection of what he had done."* I could multiply such cases, but time forbids me. So much for the materialist's logic. Again, the materialist argues that because the manifestation of mind ceased when the brain was pressed upon by the bone, it follows that mind is the function of the brain. I showed that this logic would make him accept the heart as a seat of thought, and now I assert that he must also believe that the spinal cord has a similar function; because it is a well-known fact, that, "when the spinal cord at the upper part of the neck is compressed, the animal instantly dies," the part being thus even more vital than the brain. Materialists confound vitality with intellect—two vastly different forces. If the vital parts of the body are the thinking parts, then the mind has various centres; but, of course, that is mere speculation, not fact. But materialists ever take their own *ipse dixit* as established truth, and thereby err. It may be asked how do we account for the seaman's unconsciousness immediately following the pressure of the brain? In the

* Philosophy of Sleep, p. 104.

first place, I confess my ignorance of the cause of the phenomenon; and, secondly, I will tell you what I think was the cause. When the cerebrum was pressed upon by the bone, other parts of the encephalon were implicated—some interference with the masses underneath was introduced—and the loss of mental manifestation may have resulted from such interference. This is all the more probable when we consider that the brain may be sliced away inch by inch without the cessation of consciousness—but more of this anon. And, again, “we know that it is not so much the *direct* effects of the pressure of the spinal cord which causes death, as from the paralysis superinduced upon the nerves below the point of compression, and more particularly from the paralysis of the respiratory nerves. These nerves are cut off from the influences of volition; the respiratory muscles do not act, and death necessarily and immediately ensues.”* Now, if we could trace the process of the effects of brain pressure as clearly as we can that of the spinal cord, I think that my conjecture would be verified; but, as it is, the materialist has nothing to offer in defence of his position but rash assertion, false deduction, and self-contradictory fallacy. The functions of the brain are not very well known. We have the brain, and it serves some physiological purpose, but that purpose is not well defined; but the day will soon come, I hope, when we shall

* Philosophy of Phrenology, p. 75.

know all about it. That day will not be hastened in any degree by distorting facts to suit theories already formed. Again, with regard to the case of the seaman, I assert that circumstances might have occurred in his after life which would have brought to his recollection the various thoughts and feelings which transpired during his term of apparent unconsciousness. Such cases have occurred. How often do we think that our sleep was a profound one, and entirely exempted from dreams; yet, during the course of the day, some incident transpires which vividly recalls our dream, plainly showing that we did dream, but that our recollection was at fault. In cases of trance, for instance—where parties often appear as dead, but really are not so, and have even been buried, the doctors having pronounced them dead—the sleepers appear in a more perfect state of oblivion than this seaman, and yet no disease of the brain is asserted. Analogy, therefore, as well as logic and deduction, is opposed to the theory that mind is the function of the brain. We are often asked, If man is dual, as you assert, when does this soul or mind enter his body, and how? These questions I will consider in another paper, as they do not belong to our present subject; but the question reminds me of the ejaculation which Peter Pindar puts into the mouth of George III., who, on seeing an apple pie, exclaimed, in his astonishment—“How the devil got the apples in?” It is further asserted by materialists, “that with the decline of

organism mind decays, and becomes decrepit with the body, and that both are at the same time extinguished by death." This assertion is neat, and has the appearance of a *formula*, but it surely is not true. The mind does not always decay with the body. Some men manifest a strength of mind at the hour of death which they never previously exhibited; and if this assertion is not true of every man, then it is utterly worthless as a defence of materialism. Dr Priestly, who taught a doctrine of the materialists similar to this, at his hour of dissolution, gave the lie to the doctrines of his life, for, as he approached his end, his mind seemed to get clearer and clearer. So with Dr Dwight—his latter end proved that mind was not wholly subject to the body—and so with thousands whose minds were not enfeebled by bodily weakness. That the body is the instrument of the mind I do not deny, and that its ailments often affect our mental expression I quite admit; but if an instrument is out of tune and order, it surely is not the fault of the musician, or a manifestation of weakness on his part, if he cannot bring harmony out of this disordered instrument? Surely no one would be rash enough to assert that. Why, then, do they argue that, because the body is out of tune, the mind is also in a like condition? If the deduction is false in the former case, it is no less so in the latter. These are the principal arguments adduced by materialists in defence of their theory of the brain. I think that they are very weak ones; but their weakness

will be all the more apparent when we take up our position with regard to the brain in the second part of this paper. In the meantime, I deny that the materialist has sufficient evidence to support his theory.

We will now take a slight survey of the position of the second school, viz., those who hold that brain is *the* organ of mind.

CHAPTER III.

THE POPULAR THEORY OF MIND AND BRAIN UNTENABLE
—ARGUMENTS FROM PHRENOLOGY UNSATISFACTORY.

MOST of the arguments adduced by the supporters of the first school are set forth also by the second; and of course many of the answers already given apply with equal force here. But the second school has a much wider range of observation and argument than the first. The materialist cannot conceive of the immortality of the soul, while the second school of physiologists has full faith in that blessed hope. Pre-eminent in this school are the phrenologists, who not only hold that brain is the organ of mind, but that particular portions of it have well-defined offices. They thus divide the brain, so to speak, into thirty-six parts—some of them more—and each of these have their own special duties to perform. Phrenology is certainly beautiful enough as a theory, and by its laws the phrenologist gives an apparently scientific explanation of various

phases of psychological phenomena. I say *apparently* advisedly, because I question if phrenology itself has any real basis. It probably has an element of truth within it; and our duty is to study this science in order to discover the wheat from the chaff. But as I am now addressing a few phrenologists, I had better give my objections against their science in due form. *1st*, I object to it on physiological grounds; *2nd*, I object to it because, in its delineations of character, it is often wide of the mark. First, then, the surface of the brain has no corresponding protrusions to those organs discovered by phrenologists on the head. "The convolutions of the cerebrum are everywhere similar and continuous, like (as we have already said) so many folds in a piece of velvet. They are not separate—they are not different: they are identical. Why, then, can we suppose that they are the organs of very different functions? We do not imagine that one lobe of the liver, or lobule of the kidney, plays a different part from that of its fellow. Why, then, do we imagine that one convolution, or group of convolutions, can be devoted to reasoning and another to loving—one to the perception of colours, and another to an instinct?"* Phrenologists, I know, evade these questions by asserting that observation has taught them that their science is correct. But this evasion in no way removes the scientific difficulty. And as phrenology is professedly the physiology of the brain,

* Physiology of Common Life.

its students are bound to reconcile it with their science. Besides, phrenologists are not quite at one among themselves. O. S. Fowler, a very eminent phrenologist, has one or two organs that his brother phrenologists have not. George Combe, another eminent man in the same field of thought, says that Dr Spurzheim's classification of the organs is open to objection. "The time," continues Mr Combe, "does not seem to have yet arrived when a perfect arrangement and nomenclature of the mental faculties will be possible." That this statement is true I do not question; and "pity 'tis 'tis true." Phrenology has no scientific basis, and cannot, therefore, admit of scientific proof; for until cerebral physiology is better known—the functions of the various parts within our cranium clearly defined—no one has any right to attribute faculties to the brain when he has no proper means of proving his assertion; and that the cerebrum and cerebellum have not the functions assigned to them by phrenologists I will shortly prove. In the meantime I will call attention to their oft-repeated assertion, that observation has proved the truth of their science—if it may be called a science. First, they state that the party who is being manipulated generally concurs in the statements of the manipulator, and that their testimony should prove the truth of phrenology. This I utterly dispute. The phrenologist will not allow himself to be corrected. I once got my organs read by a gentleman, who is not far from me at this present mo-

ment, and he stated that I could not appreciate poetry by any means, and that Shakespeare was entirely beyond my reach. I told him that from my earliest years I was fond of poetry, that I had read very attentively nearly all the poets, had composed verses myself, that I had read Shakespeare carefully—at least seven times, some of his plays more—and that I had even written a volume of tragedies; and so fond was I of poetry and the drama, that I was then busily engaged in writing their history. I made every effort to convince him that I had a high appreciation of the poets, and that those who knew me intimately thought so too—but all to no purpose. He told me that he had studied phrenology so long he knew that he was correct. My reasoning with him, therefore, was in vain. Now, I assert that phrenologists do not always accept—nay, seldom accept—the testimony of the manipulated, if that testimony is contrary to theirs; and my case is a case in point. Another phrenologist, who, like the former gentleman, is known to our president, stated that the poetic and ideal in my mind were greatly developed, much more so than the analytical portion. The statement of the latter gentleman is entirely opposed to that of the former; and I have a phrenological chart of my head in the house, the statements in which differ almost *in toto* from those of either of these two gentlemen. For instance, one party says that I have a great amount of firmness; another says that I have no firmness,

and strongly enjoined me to cultivate it; and a professional phrenologist felt my organs twice—three months intervening between each reading—and the one account sadly contrasted with the other; and I could mention several cases of a similar nature. It may be said in reply to this, that the science is not responsible for the mistakes of its professors. Quite true. But these men do not consider that they made any mistake whatever—each considers that he was correct in his delineation. The question now is, who is to be arbitrator, and will these men accept of his arbitration? Our president may say, “This is the state of the case,” and give us his opinion; but possibly these men may consider that their statements are as phrenologically true as his. Then, I again ask, who is to be arbitrator? I think no one can arbitrate in a question where phrenologists disagree. Is there a perfect standard of appeal amongst them? I think not. Another question arises here—How came these men to differ so? They all felt the same organs—they all professed a knowledge in their science—and they may have as great a knowledge of phrenology as those who would assert that they were ignorant of it. It is against phrenologists that they have not a perfect nomenclature and classification of organs, and that there is such scope for contrary conclusions among them. Their mapping out of the brain should be as exact as a proposition in Euclid, and their answers as uniform. Until we have this, phrenologists

are scarcely in a position to manipulate the human head. Now, that races of men, or the varieties of a race, may be determined by the shape of the skull, I admit freely; and that a knowledge of this subject is useful, nay indispensable, to scientific men, I also admit. But that this kind of craniology differs materially from the craniology of the phrenologist, I think none will dispute, and I dare say there is much room for progress in both of these sciences. Again, phrenologists tell us that they not only have the assent of the man who is being manipulated that their statements are true, but they likewise have the concurring testimony of those who know him. But, under the circumstances, I place little value in that sort of evidence. For instance, I have read some two hundred heads during the last three years, and I generally had the concurring testimony of those who knew the parties. I confess that I know very little of phrenological manipulation; but my experience is, that if the parties present are prejudiced in favour of phrenology, then all the statements of the phrenologist will be true: but if the said parties are prejudiced against phrenology, then all, or nearly all, his statements will be pronounced false. Men are not free from prejudice on this vexed question, and their bias will be manifested in one form or another. I have found phrenologists very far wrong in their delineation of character, and hoaxes have been perpetrated on them, which tell perhaps not a little against their

hypothesis. Take an instance. "Some years ago, when Dr Spurzheim was in Edinburgh, a pretty lively controversy took place between him and Dr Gordon. The friends of Spurzheim were called Spurzheimites, and the friends of the latter gentleman, Gordonites. In this strife of parties, Mr Alex. Nasmyth, the celebrated landscape painter, sent to his phrenological friend, Dr —, the cast of a remarkable head. The cast was carefully examined, and its high moral and intellectual development duly recorded and presented to the artist. But, alas! for science. The cast had been taken from a remarkable *turnip* that had presumed to compete with the craniology of man. The result was instructive, as well as amusing: it outweighed a thousand arguments, and gave occasion to the following lament:—

‘The tide of fame to Spurzheim’s name,
Rolled o’er the German deep;
The tide was spring, but—fickle thing—
It now has ebbed to *neap*!’”

Take another case. A party of noblemen called upon Dr Leger, the celebrated magnetoscopist, to have a phrenological delineation. The doctor’s *modus operandi* is summed up thus:—“When the sitter had taken his seat, the doctor placed a finger of his right hand on the brass knob of the magnetoscope, and a finger of his left hand on each phrenological organ, and its intensity was measured by the numerical extent of the circle described by the pendulum. . . . In order

to show that the pendulum was not put in motion, or in any way influenced by the pressure of his fingers, Dr Leger connected another pendulum with the brass knob by means of a piece of whalebone, or dead matter, along which it is supposed that human electricity would not pass, though it would convey to the second pendulum any mechanical influence exerted on the first. This subsidiary pendulum always stood still, whatever were the movements of the other, and convinced all that the acting pendulum was moved only by an influence from the organ under examination." The noblemen submitted, of course, to the above conditions, and received an analysis of their moral and intellectual character. One of them, however, "went a second time to the Dr in a new costume, and obtained a character essentially different from the first; and we have no doubt that if the Earl of E—— had returned in disguise, he might have forfeited the high character the pendulum was pleased to assign to him."* This case also tells against phrenology, and shows that phrenologists have by no means the strong evidence from observation which they would make us believe. The argument that the human head is like a labelled box, and that they merely read the labels, is incorrect. The human head may or may not be like a labelled box, but it is evident that phrenologists, as such, are unable to read the label—they may guess, and their guesses may be happy

David Brewster. *Good Words*, 1863.

or unhappy ones; they are sometimes the former—oftener the latter. If the phrenologists still persist in saying that their guesses are reading, then I maintain that they are very bad readers—such reading as theirs would likely place them at the foot of the class in any country school, and keep them there. Modern phrenologists, in their delineations of character, always take into account the temperament, the muscular activity, and the physiognomy of the individual—thus calling in the aid of three very powerful accessories, and how far they may be indebted to these accessories we cannot say. The physiognomist, who, in my opinion, is a better delineator of character than the phrenologist, has little else to assist him than the contour of the countenance and the temperament, yet the results of his labours are as satisfactory as the others, and certainly he never makes such sad mistakes as the latter. I have taken a great interest in phrenology. I should like to see it studied with vigour and perseverance; but I strongly recommend phrenologists to give up that intolerable dogmatism which seems to cling to nearly all of them. Where dogmatism is, progress ceases. Every phrenologist should not consider that he is the pope of the science—should not consider that the sum of phrenological knowledge is confined to the limits of his cranium, but rather prosecute his own studies, and at the same time hear with patience the opinions of others who choose to differ from him. We never

arrive at truth by first adopting a theory, and then discolouring all facts to suit and dovetail with that theory. We ought rather to reverse the position. Have our well-authenticated facts, then form a theory that will suit or dovetail with those facts. I think the phrenologists are in the former position—they try to make facts suit their theory, and thus retard the progress of the science. The physiological evidences and arguments advanced by the phrenologists and others that belong to this school—who assert that the brain is the organ of the mind—have been already examined, and in some measure refuted, so I need not again refer to them here. I think that neither the first nor the second school have made out any case in defence of their respective theories. We come now to examine the arguments of the third school, viz., those who hold that mind is co-extensive with the nervous system.

CHAPTER IV.

GEORGE H. LEWES' THEORY OF MIND AND THE NERVOUS SYSTEM.

THE advocates of this school—with George Henry Lewes at their head—adduce the most cogent arguments and experiments against the two former ones. This third school has evidence—vast evidence—to support their position, that the brain is not the only organ of mind. They assert that the spinal cord is as much an organ of thought as the brain—it being composed of a like material, showing similar pathological symptoms and subject to the same diseases, both being alike fatal. They hold that there is no good reason for believing that the one is an organ of thought without ascribing a like function to the other; for all arguments in favour of the brain being an organ of mind are as applicable to the spinal cord being also its organ. They produce cases where animals have lived and manifested sensibility after their brains were removed,

but defy any one to produce a case where they had the same power when the spinal cord was removed. Let us state a case or two in favour of Mr Lewes' position. I quote from "Physiology of Common Life," by G. H. Lewes:—"Some time ago I removed the brain from a frog, and left it on a plate to recover from the effects of ether. The next morning the servant came to me with suppressed alarm, assuring me my frog would escape. 'No, there's no danger; it can't escape—its head is off.' 'But I assure you, sir, it's quite lively; I thought it would jump off the table.' On going up stairs I found the animal in the middle of the room." We read also of a "tortoise which, after the whole cranial cavity had been completely emptied, walked about as usual, and lived for five months." Dr Inman, of Liverpool, "completely emptied the cranial cavity of a frog, yet found the animal quite vivacious; there was no lack of spontaneous movement, and the reflex actions were distinct enough in the eye, eyelid, and other places." Mr Lewes continues:—"I decapitated a frog and a triton, and merely divided the spinal cord of another triton and frog. The four were placed in the same pan. At first the spontaneous movements of the decapitated pair were insignificant; but on the second day the headless toad was quite as lively and restless as the frog with a head, and the headless triton little less so than his companion with a head." Mr Lewes decapitated another triton, and its movements were

precisely similar to those made before decapitation. He says "that the evidence of spontaneity and choice, of sensibility and volition, is unmis-takeable, and that he has verified this many times. "A frog is decapitated, or, better still, its brain is removed. When it has recovered from the effects of the ether, we place it on its back, and touch with acetic acid the skin of its thigh. No sooner does the acid begin to burn than the frog stretches out the other leg, so that its body is somewhat drawn towards it. The leg that has been burned is now bent, and the back of the foot is applied to the spot rubbing the acid away, just as your thumb might rub your shoulder. This is very like the action of the tickled child, who always uses the right hand to rub the right cheek, unless it be held; but when the child's right hand is prevented from rubbing, the left will be employed; and precisely this do we observe with the brainless frog—prevent it from using its right leg and it will use its left. To show this we decapitate another frog, and cut off the foot of the leg we are to irritate. No sooner is the acid applied than the leg is bent as before, and the stump is moved to and fro, as if to rub away the acid. But the acid is not rubbed away, and the animal becomes restless, as if trying to hit upon some other plan for freeing itself from the irritation; and it is worthy of remark that it often hits upon plans very similar to those which an intelligent human being adopts under similar circumstances.

Thus, the irritation continuing, it will sometimes cease the vain efforts with its stump, and, stretching that leg straight out, bends the *other* leg over towards the irritated spot. The brainless frog often chooses a new plan when the old one fails; and an illustration of how sensations guide and determine its movements may be seen in another observation of the brainless frog, when, as often happens, it does not hit upon either of the plans just mentioned, but remains apparently restless and helpless—if, under these circumstances, we perform a part of the action for it, it will complete what we have begun.” The animal performs movements, and manifests as much action and volition when its brain is removed as it did previously to that operation. Decapitated frogs also swim vigorously on being thrown into water. “Young rabbits and puppies, when taken from their mothers, manifest their discomfort by restless movements. No one doubts that sensation is present in such cases. Now, if the brain be removed from rabbits and puppies, precisely similar phenomena are observed when these young animals are taken from their mothers.” Children are sometimes born without brains. Lallemand exhibited several infants born without brains. “These infants breathed, swallowed, suckled, squalled, and gave very unequivocal signs of sensibility.” We read also of “a new-born infant whose brains during the birth had been completely extirpated (to save the mother’s life), and was wrapped in a

towel and placed in a corner of the room as a lifeless mass. While the surgeon was giving all his care to the mother, he heard, with horror, a kind of murmur proceeding from the spot where the body had been placed, and in three minutes a distinct *cry* was heard. The towel was removed, and, to the surprise of all, this brainless infant was seen struggling with rapid movement of its arms and legs; it cried, and gave other signs of sensibility for several minutes." I quite believe if children could survive the shock of craniotomy we would have thousands of cases of brainless infants; but this operation is so violent that very few exist after it. Mr Lewes and this third school, having proved that brain is not the only centre of volition and sensibility, proceed to show that the spinal cord is a centre at least of sensibility. This they prove by an elaborate series of experiments—first, in the lower animals, and then from their observations of human beings with diseased spines. Let us look at their evidence on this point. They divide the spinal cord of a triton, then irritate the head segment—the former part of the animal crawls, dragging the hinder part with it, plainly showing that sensibility extended no further than the cut in the spinal cord. Materialists may assert, "Ha! that is easily explained: the former half contains the brain, and, of course, must have sensibility; whereas the latter half has got its connection with the brain cut off, therefore its sensibility is gone, and the animal must drag it." But (alas! for this argument)

I find that if I irritate the tail part, it crawls and drags the head part after it; so that, if the former part has sensibility because it contains the brain, then I assert that the hinder part has sensibility because it does *not* contain the brain—"in fact, division of the cerebro-spinal axis is tantamount to a division of the animal into two halves, and each half obeys its own nerve centres." "Mr Grainger removed a portion of the cord of a very young rabbit. The peculiar fact noticed was that, from time to time, without any stimulus being applied, the hind legs were repeatedly and forcibly thrown back, as if the animal were running quickly, whilst at these times the fore limbs, which were still under the control of the animal, remained motionless." I know that the two former schools try to explain away the possibility of two nerve-centres, by what is called the reflex theory. But I think that "reflex theory" is like the terms instinct, law, natural cause, reason—terms by which people hide their own ignorance from themselves. The reflex theory does not touch the position of this school in any form. Like many other theories, it proves too much, else proves nothing; for if the reflex theory is adopted at all, it must be extended to the brain—and, if so, then it most handsomely cuts its own throat, because brain action would cease to be the result of volition, and therefore not the result of mind, which, of course, defeats the very purpose for which the "reflex theory" is quoted. And if

this theory be not extended to the brain, then we cannot either logically or physiologically assert that cerebro-spinal action is nothing but reflex action. Dr Laycock, Professor of Medicine in Edinburgh University, writing on this subject, says:—"I was led to this opinion by the general principle, that the ganglia within the cranium being a continuation of the spinal cord, must necessarily be regulated as to their reaction on external agencies by laws identical with those governing the spinal ganglia, and their analogues in the lower animals." It is added to this by Mr Lewes:—"That whatever is true of the properties of the cranial centres must also be true of the spinal centres. If the brain has sensibility, the spinal cord must also have it." It may here be observed that the bee, the amphioxus, and other insects, have no brain, but merely ganglia within their cranial cavity. I need scarcely refer to the evidence drawn from diseases of the spine—how that, when the cord is diseased, the patient betrays the same emotions as when the brain is diseased, and generally receives the same medical treatment; so that, from a pathological point of view, they are almost identical. Another argument brought forward by this third school is, action during sleep, which cannot be attributed to the brain, such as—"The brain of a sleeping man is supposed to be disconnected from all participation in the activity of the cord; either the man is in profound sleep, and his brain is at rest—

being cut off almost from all external stimuli—or is occupied exclusively with its own excited activity—with its dreams. The man, during this state, breathes, swallows his saliva, coughs if anything gets into the windpipe, and turns in his bed. The organic processes go on, and his brain has little if any share in all these various actions. From the sleeping man we remove the bedclothes; the cold air soon produces a sensation of uneasiness—he turns and seeks a warmer spot; perhaps he stretches out his hand and pulls the bedclothes over him again. The evidence of volition and sensation here is unmistakeable. If he did not feel the cold, he would not move; if he did not will to move and to pull the bed-clothes over him, he could not do it.” This third school proves very clearly that sensibility is not confined to the brain, but is co-extensive with the nervous system, and shows also, very clearly, that the arguments adduced by the two former schools to prove the relation of mind and brain must logically prove that the spinal cord has the same relation to the mind as the brain has—either that, or neither of them have a relation to mind. It has often been urged against Mr Lewes that his experiments were chiefly confined to animals very low in the scale of being, and that therefore they have not a legitimate application to human creatures—that they cannot determine a question of such intricacy as the one under consideration. This objection is not quite true. Mr Lewes—although no doubt his

experiments were confined to frogs, tritons, rabbits, puppies, &c.—has evidence drawn from other sources of an incontestable character, such as patients with diseased spines; and the evidence drawn from the one beautifully harmonised with that drawn from the other. His arguments against the brain being the organ of mind seems to me almost impregnable; and it is on account of his evidence on this point that I specially refer to him. The school of which he is the avowed champion is valuable for the facts which it produces to disprove the theories of the two former ones. But its own theory I dispute, because it does not admit of proof. I know very well that, from a physiological point of view, I cannot disprove their assertion of the relation of mind and the nervous system; but I know equally well that they cannot prove it—and the burden of proof lies on their shoulders, not on mine. Yet I expect to disprove their position by several psychological arguments to be adduced immediately. Having now reviewed these three physiological theories, we will take up our own position, which is, that the brain is *not* the organ of the mind—or at least the evidence on which the assertion is based is insufficient to establish it, and the arguments in its favour are too meagre to prove its truth. Our evidence will be arranged under two heads—1st, The Physiological Argument; and, 2ndly, The Psychological Argument.

CHAPTER V.

THE BRAIN IS NOT THE ORGAN OF MIND—CASES OF DISEASED BRAIN WITHOUT IMPAIRED INTELLECT.

IT is a pity for the two former schools already referred to, that they have not yet decided upon what is the respective functions of the cerebrum and cerebellum. I know that by some intelligence is ascribed to the former—animal instinct to the latter; but there is nothing like unanimity among themselves on this point, several writers* having denied consciousness to the cerebral hemispheres. For instance, certain writers have placed the *sensorium commune* in the *corpus callosum*; others in the *corpora striata*; others, again, in the *pineal gland*, the *medulla oblongata*, *certrum ovale*, &c. But, as Mr Lewes has remarked, “they might as well have placed it in the jaw-bone, or any other bone, as far as any scientific warrant can be given for these opinions.” And few good physiologists agree with Gall in assigning the

* Prochaska, Muller, &c.

sexual instinct to the cerebellum; but at the same time we have no good reason to assert with certain physiologists that this smaller brain is the organ of muscular co-ordination, because I think experiment has disproved it. Mr Solly, in his work on the brain, reports the case of a child whose *cerebellum* was entirely wanting, yet it reached the years of twelve, and only a slight part of the co-ordinating power was affected. And out of ninety-three cases of diseased cerebellum, Andral found *only one* to favour the opinion of physiologists; and, as we have already seen, certain animals are quite vivacious after their entire head is cut off, so that neither disease nor experiment—two very valuable evidences—favour the current opinion. Indeed, some men hold the cerebellum to be a seat of sensibility, as we may learn from the following remarks of a very eminent physiologist:—"The opinion advanced by some physiologists that the cerebellum is the regulator of the voluntary movements, if we attentively consider the reasoning on which it rests, seems to me to strengthen the idea which places the *central* seat of sensibility in the cerebellum." Others, again, assert that the *medulla oblongata* is a seat of sensibility and volition. Müller says that it is "the seat of volition;" and again, he states that "it is the seat of the faculty of sensation." Others say—"That the medulla and the ganglia at the base of the cerebrum constitute the sole sensorium;" and we have already seen that sensation, &c., has been assigned to the spinal cord—so

that we find no unanimity among physiologists with regard to the functions of the various parts of the brain. This is a pity for their own sakes ; because they each disprove what the other has advanced, and the experiments of either contradict the experiments of all ; and from this labyrinth of confusion how can we extricate truth ? When the facts are at variance (which proves distortion somewhere ; because truth is one, and one part cannot contradict the other—all truths must agree with *the* truth), how can we adopt a proper theory ? But these men cannot but disagree, because they fight not for truth, but for the defence of a favourite theory. Physiologists, I am sorry to say, are not the only ones guilty of such conduct. I consider that these sadly contradictory theories tell very much against those who hold that brain is the organ of the mind ; and their duty is to collect and classify more facts, and not waste their time and energy in defending a mere hypothesis. It is here worthy of remark that the *medulla oblongata* exists before the brain—that every part of the brain exists at the period of birth, and that the brain attains its full size at the seventh year. We will state a few cases where the brain was wholly or in part diseased, without any intellectual derangement ensuing :—

1.* “A young man, aged eighteen years, had been for six or eight weeks troubled with a cough and

* We are indebted to Dr Abercromby for these cases of brain disease.

pain in the chest, but afterwards complained of severe pain in the right temple; a couple of months passed with little or no convalescence, when the patient began to complain of pain at the back of the head, and in the course of another month he died rather suddenly, having the day before become extremely weak and pale without any obvious cause. *Inspection*: On removing the *dura mater*, there appeared on the middle of the right hemisphere a remarkable depression, which, when cut into, was found to arise from an extensive mass of pure remollisement (or softening of the brain), the part being in the state of a soft white pulp, without any appearance of pus, and without fetor; it extended the whole depth of the hemisphere. In the cerebral matter adjoining to this disease, there was a small abscess, no larger than a bean, lined with a firm, soft cyst of coagulable lymph. On raising the brain a remarkable appearance was found in the basilar artery. Through the extent of about an inch it was very much enlarged and hard, and this portion was found to be completely filled up by a firm white matter, without any appearance of blood." Now, one would think that if brain be the organ of mind, surely this youth's mind was deranged? Not so; we read "*that speech and intellect were entire.*"

2. Another youth of eighteen, who had "the right hemisphere of his brain, to about half its depth, entirely reduced to a mass of fetid pus; in the centre

it was fluid, and towards the external parts it was more of a pulpy consistence. In this mass was found some small coagula of blood, and the ventricle contained a considerable quantity of bloody fluid." Notwithstanding all this disease, we do not read of any mental derangement; but, on the contrary, he was sensible, and knew all the persons around him.

3. Another young man, of the same age as the former two, had "the whole of the posterior part of his brain one mass of undefined suppuration. There was considerable deposition of coagulable lymph on the surface of the brain in several places, especially under the anterior lobes. There was a very small quantity of fluid in the ventricles, which contained considerable remollisement of the fornix. In the substance of the brain, near the base, there was a small tumour of an ash colour, which contained a cheesy matter approaching to suppuration," and other marks of disease, *yet the mind was unaffected.*

4. A young lady, aged eighteen, had "considerable effusion in the ventricles of the brain. In the substance of the right hemisphere there was a soft, tubercular mass of large size, and *there was considerable remollisement of the cerebral substance* surrounding it. There were two small tumours of the same kind in the cerebellum." This brain disease was complicated with extensive bodily disease; yet the lady appeared sen-

sible to every impression, and answered questions distinctly when roused.

5. A man, aged twenty-eight, had "the whole left side of the cranium perforated by numerous openings, between which there were bony ridges, filaments, and processes of a variety of shapes—the sharper spiculæ piercing the substance of the diseased integuments. The two largest perforations corresponded to the seats of the two original tumours, and, corresponding to these, there were two small abscesses in the brain. The inner surface of the *bone was diseased* in the same manner as the outer, and the dura matter was connected to it by a soft fungus which arose from every part of the diseased bone." So that, along with the diseased brain, we have a diseased cranium. We read that "this man died gradually—exhausted, but retaining his faculties to the last—two years and a-half after the commencement of the complaint."

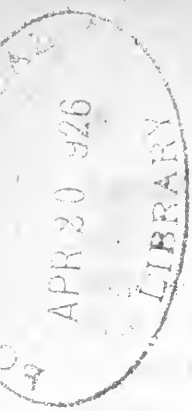
6. A gentleman, aged seventy, had "a copious effusion of fluid over the whole surface of the brain under the arachnoid membrane, which in various places, particularly at the posterior part, *elevated that membrane in the form of small bladders, and separated* some of the convolutions from one another, so as to form depressions on the surface of the brain. The ventricles were also distended with fluid," &c. Yet this gentleman

“retained his memory and all his faculties entire till within a few hours before death.”

7. Of a boy, eleven years of age, we read thus: “On the surface of the left hemisphere the membranes adhered firmly to the surface of the brain in the middle lobe. On raising them at this place, fluid escaped in great quantity, which was found to have been discharged from the cyst of an immense hydatid, contained within the left lateral ventricle, and which had nearly advanced to the circumference of the brain. It contained about six ounces of limpid fluid, and, besides this, there were several ounces in the proper cavity of the ventricle.” And, notwithstanding this mass of disease within the boy’s head, “his intellect was not affected, but at times was extremely acute.”

8. A medical man, aged fifty-six, “had the left hemisphere of his brain diseased throughout in a very singular manner. Some parts of the mass were indurated, others softened; and it presented a variety of colours, chiefly a rose colour, grey and yellow, and the more diseased portions were highly vascular. In some places there were distinct insulated masses, inclosed in vascular cysts; these were generally indurated, but some were softened. . . . The whole left hemisphere, in fact, presented little else than a mass of concentric indurations and softenings of the various colours which has been mentioned.” Other

parts of the brain were likewise diseased; yet this man "had his understanding entire." I Read also in the "Anthropological Review" (vol I.—article: "Cerebral Physiology") of a boy who, by some accident, got his skull fractured and his brain flowed out. When he recovered from the shock, to the amazement of all, he asked his friends what it was that came out of his head, when they told him it was his brain. "Oh!" ejaculated the boy, "send it to the schoolmaster, for he used to say that I had no brain." In the same work, I read of a soldier who had a bullet lodged in his brain; yet he neither died instantly, nor did he die mentally deranged.



CHAPTER VI.

INSUFFICIENCY OF MODERN PHYSIOLOGICAL THEORIES OF MIND AND BRAIN—CONCLUSION.

NOW, I could multiply such cases as the foregoing; but I have encroached too much upon your time already. Yet these cases prove that neither insanity nor mental weakness is the necessary result of brain disease; and we know that brain disease is not the result of insanity or mental weakness. That some of the insane have had diseased brain I do not deny. But what does that prove? Simply nothing; for, if insanity be the result of brain disease, how is it that a brain may be completely destroyed and yet no insanity ensue? And here it may be well to state an axiom, for the guidance of those who wish to prosecute this study: "The disappearance of a function on the removal of an organ is no proof whatever that the function had its seat in that organ; but the *persistence* of a function after the removal of an organ is rigorous

proof that the function had *not* its seat in that organ." I therefore argue that the brain cannot be the organ of the mind, because mind can manifest itself when that organ is extensively diseased or wholly gone; and I likewise deny that apoplexy and kindred affliction are the result of brain disease. We have numerous cases on record, where men and women have died of that trouble, and yet, after the most severe scrutiny of the brain, no disease could be discovered. Take a case:—A lady, aged forty-five years, lay in a state of perfect apoplexy, with stertorous breathing, &c., yet, on inspection, "no disease could be detected in the head after the most careful examination." "A man, after complaining of headache and giddiness, fell down in a state of insensibility, with some convulsion. He then lay in a state of profound apoplexy for forty-five hours, when he died." Yet "no morbid appearance could be discovered in the brain on the most careful examination." A young lady was attacked in a similar manner, yet, "after the most minute examination, no morbid appearance could be discovered in the brain." And as for cases of paralysis, accidents often induce them, and accidents often remove them again. For instance, "A woman, who had been paralytic from the age of six to sixty-four, suddenly recovered the perfect use of her limbs, when she was very much terrified during a severe thunderstorm, and was making violent efforts to escape from a chamber in which she had been left alone." A man who had been many years

paralytic recovered in the same manner when his house was on fire; and another, who had been ill for six years, recovered suddenly, in a violent paroxysm of anger. Another man, who had lost his speech for four years through a stroke of paralysis, "one evening got intoxicated, and fell from his horse several times on his way home, and was at last taken up into a house near the road and put to bed. He soon fell asleep, and had a frightful dream, during which, struggling with all his might to call for help, he did call out, and from that time recovered his speech perfectly." Epilepsy is also subject to the same conditions. Maniacal delirium is not the result of brain disease. Sir Charles Bell mentions the case of a waggoner who was afflicted with it, yet his brain was entire, and, strange to say, this man became quite sensible the day before his death, and recovered the use of his limbs which had been paralysed. But it is a notorious fact, that nearly all maniacs, and those who have been suffering from acute fever, recover their senses and intellect before their final dissolution. This fact has been very touchingly referred to by some writers, but time forbids me to dwell upon it. It may here be asked, What do you consider the organ of thought? You seem dissatisfied with the present physiological theory—Can you give us anything better? My answer is, I am dissatisfied with the present theories of the mind and brain, because, as I have tried to show, they are mere hypotheses,

and ought to be received as such—not as indisputable facts and incontrovertible principles. I confess that I have no theory to offer; but I consider that man nearer the truth who has no theory than him who has a false one. The vast problem of the relation of mind and brain is yet to be solved, and the subject has but to be stated in order to show its magnitude. Giving mind and brain as two things absolutely opposite, the problem is, how can the one act upon the other? And he who succeeds in solving that far-reaching problem will possess no mean intellect. The world, with its boasted genius and talent—and great no doubt they are—has never yet produced the man who can put this subject to rest—who can say this is the solution of the much-vexed problem. And the angry contests of to-day are little likely to hasten the period. Let us fling away theories—false theories—and question Nature in “a loving, inquiring, and earnest spirit, having our minds open to the reception of fact, and calmly acquiesce in it when presented.” We must not dictate to the Oracle we consult, but rather be dictated to. If we woo Nature earnestly and lovingly, she will give a kind response. Interrogate her thus, and she will disclose her treasures to us, and her treasures are richer far than man ever dreamed of; and we who hold that

“The soul, secured in her existence, smiles
At the drawn dagger and defies its point,”

have an incentive to study Nature which the mate-

rialists never knew ; and as psychologists, we ought to consult her as a child would consult its parent, and abide by what she says, whether that be in opposition to our preconceptions or not. Let us listen to what *she* says, and not be so anxious to thrust forward what *we* say. If we wish to have certain data on which to found our opinions, let us consult Nature, and not the jarring *and unfounded theories of prejudiced men.*

SECTION II.

THE PSYCHOLOGICAL ARGUMENT.

CHAPTER I.

ARGUMENTS FROM THE MIND IN ITS NORMAL CONDITION.

HAVING thus glanced at our physiological argument in a few of its aspects, our duty now is to advert to psychology, and cull from this extensive field some additional evidence in support of our position. The science of psychology has two clearly defined paths of observation, each of which is an inexhaustible treasury of mental phenomena. The first is—The mind in its *normal* state; the second—which is perhaps the most extensive and interesting field of the two—the mind in its *abnormal* condition. And arguments neither few nor weak could be drawn from either of these mental conditions against the schools of physiology already referred to. For instance, with regard to the mind in its normal state, it may be argued that it is wholly unconscious of using any material agency whatever in the production of thought; that attention and reflection are the only requisites to produce consecutive and well-arranged

thought; and no one has yet advanced that either of these is a material organ, or function of an organ. The phrenologist, of course, places the reflective powers of man in a given region of the cranium—but he also admits that mind is behind and above all structure. Memory—that peculiar power in us of recalling the past and its associations—is no material organ—at least we have no evidence that it is so; but, contrariwise, we have evidence that it is not the function of matter. Memory is a term, the signification of which is the peculiar power of the various faculties of the mind of recollecting their respective ideas and impressions. And without this power of retention, on the part of our mental faculties, our past experience and observation would serve but little purpose. Did our impressions, both ideal and sensational, only last for the moment, never again to be recalled—did we thus only live mentally from minute to minute, then, alas! for advancement—alas! for progress. But we do not thus live, for our retentive faculties have written their records on imperishable mind; and we not only live in the past, in the present, but also, by anticipation, in the future. Memory is thus a storehouse of events—a magazine of thought—and the mind is wholly unconscious of writing these records on any material substance. What portion of matter in our organism gives rise to those feelings which fire the lover's heart, makes him sacrifice all—life not excepted—for the lady of his choice? What portion of matter in our

organism strengthens and sustains woman in her attachment to the husband of her heart amid all her sorrows, trials, afflictions, and amid the jeers of an ill-natured world? From what portions of matter spring those noble sentiments that inspire the philanthropic heart? I say we know of no matter which can give rise to these feelings. It may be here again observed by the materialist: "That we have little or no conception of anything but matter." *We* have not! What am I to understand by this term *we*? Is it something above matter? Then I assert that our conceptions are not limited to material phenomena, because here we have a somewhat above matter; and if this "*we*" is material, then the statement can be *reductio ad absurdum*; for it simply is: matter has no conception of anything save matter. To this I would add, that we know of no matter that has the faculty of perception. If the *we* is spiritual, then the statement presupposes spirit, and upsets the theory for which it was quoted to support. But the assertion that we have no conception of anything save matter is not true, because we *have* conception of mind and spirit. The mind is as conscious of its own existence as it is of the existence of matter—indeed, some very able men have denied the existence of the latter force. And Dugald Stewart (no mean authority) says:—"Of all the truths we know, the existence of mind is the most certain, even the system of Berkeley, concerning the non-existence of matter, is far more conceivable

than that nothing but matter exists in the universe." The egotists believed in their own existence, but would not admit the existence of any other person. Abercrombie says:—"The principle which thinks is only known to us by thinking, and the substances which are solid and extended are known to us only by their solidity and extension. When we say of the former that it is immaterial, we simply express the fact that it is known to us by properties altogether distinct from the properties to which we have given the name of matter, and, as far as we know, has nothing in common with them. Beyond these properties we know as little about matter as we do about mind, . . . and we have the fullest conviction that it (the mind) would continue to exercise the same functions, in undiminished activity, though all material things were at once annihilated." Again, I argue, that conception itself pre-supposes a mind to conceive. No man ever heard of conception without a mind; and mind itself is not matter, and is not the quality or property of any known matter. All arguments hitherto of materialists have egregiously failed in proving mind to be a property of matter; for man is as conscious of the existence of his own soul as he is of his body—indeed, were it not for his mind he could have no conception of his body. Besides, there is in the consciousness of every man a sense of, and a longing for, continued existence. We may try by sophistry to reason ourselves

out of this normal condition, but our sophistries generally fail us. The "horror of falling into naught" has a place in every man's bosom. The impression is, of course, very slight in some, while it is strong enough in others. The mind often acts when all the physical functions are, in appearance at least, at an end. In cases of trance, for instance, where parties have ceased to eat for more than twenty days, the throbbings of the heart are likewise at an end. The subjects of trance are said to be wholly unconscious. I don't believe it. I take it that no man is ever unconscious, psychologically speaking. That he may have ceased to hold intercourse with others on the earth sphere, and be to all appearance dead, I quite admit; but we shall see directly that the mind is generally busy enough the while; and even though he recollect not any of his thoughts while in the trance state, it by no means follows that he had none. What evidence has the man that he was unconscious? Was he conscious of his own unconsciousness? If so, it follows that *he was* conscious after all. Was he unconscious of his own unconsciousness? In that case he is unfit to decide the point at issue. The testimony of others are alike valueless, because they have not reached that spiritual plane by which one man is able to read the thoughts of others. The following cases completely prove the statement I have made:—Dr Abercrombie mentions the case (1) "of a boy, who, at the age of four, received a fracture of

the skull, for which he underwent the operation of trepanning. He was at the same time in a state of perfect stupor; and after his recovery he retained no recollection either of the accident or the operation. At the age of fifteen, during the delirium of a fever, he gave his mother a correct description of the operation, and the persons who were present at it, with their dress, and other minute particulars. He had never been observed to allude to it before, and no means were known by which he could have acquired a knowledge of the circumstances which he mentioned." (2) "A gentleman whom I attended in a state of perfect apoplexy, *from which he did not recover*, was frequently observed to adjust his nightcap with the utmost care when it got into an uncomfortable state, first pulling it down over his eyes, and then turning up the front of it in the most exact manner." (3) Another gentleman, who likewise fell into "a state of profound apoplexy, but from which he recovered, had a perfect recollection of what took place during the attack, and mentioned many things which had been said in his hearing when he was supposed to be in a state of perfect unconsciousness." (4) "A lady, recovering from a similar state, said she had been asleep and dreaming, and mentioned what she had been dreaming about." The doctor further adds, "there are facts which tend to show that the patient is not in such a state of total insensibility to external things as his appearance would indicate;" and I

maintain a like opinion. I absolutely deny that all mental operation ceases, simply because we have no immediate evidence of such operation; but we here anticipate the latter division of our psychological argument, viz.:—The Mind in its Abnormal Condition. The materialist and the other physiological schools can find no good argument in their favour from the domain of metaphysics, for that science does not recognise an indispensable physical organ of mind. If such organ there is, I am bound to assert that we know not where it is. Theory alone, disunited from fact, is not sufficient to point it out. To establish any theory, we require, first of all, a well-arranged and classified collection of facts, and then compare such facts with our already formed theory. If the facts do not bear out our theory, let us give it up for a better one, or have no theory at all. Now, I maintain that our opponents have not a sufficient number of facts in either physical or metaphysical science to warrant them in asserting that thought is a function of brain, or that the brain is the organ of mind, or, indeed, that brain has any clearly defined relation whatever with thought. We will now examine the second portion of our psychological argument, viz.: The Mind in its Abnormal Condition.

CHAPTER II.

ABNORMAL CONDITIONS—DREAMING—REMARKABLE CASES OF ITS PROPHETIC POWER.

THERE is under this head a very wide range of interesting and instructive phenomena—a field of observation which the purely metaphysical leave almost wholly uncultivated. But it is eminently the duty of every psychologist to study this subject deeply and carefully, not in a spirit of envy, or a desire to harangue against his neighbour's theory, but in a spirit of love and forbearance, as one searching for truth for its own sake, and for the sake of his fellow man. The first abnormal condition of mind, then, which demands our consideration is dreaming.

What are dreams? and how are they produced? are questions far from being satisfactorily answered. Yet in all ages philosophers have speculated upon them, and physiologists, true to their long acquired name, have theorised upon them, and the psychologists have

uttered their conjectures; but these men have not by any means put the subject to rest. We are now about as ignorant of the philosophy of dreams as ever we were. I need scarcely stop here to examine any of the many theories which have been formed on this subject, but refer you to Dr Binn's "Anatomy of Sleep," Dr M'Nish's "Philosophy of Sleep," and Sir Henry Holland's "Chapters on Mental Physiology." The dreams which I will now relate cannot be explained in a satisfactory manner by any one who holds that the brain is *the* organ of mind, or that thought is a function of brain, because these men are bound to assert, if they would be logical, that, without the combined operation of the five senses and the brain, we cannot see, hear, touch, taste, or smell. Now, if I prove that we *can* and do have these special senses without the aid of the organs of these senses, then I consider that my case is in some small measure made out, or at least my opponents' theories negatived. It does not fall within the range of my present subject to explain the *how* or *modus operandi* by which we see, hear, taste, &c.; but, possibly, you may all know how these senses operate or are operated upon nevertheless. Having made these remarks, we will proceed with our cases:—

Case 1.* "A Lord of the Admiralty, who was on a visit to Mount Edgecombe, and who was much dis-

* "Health," edited by Dr Sexton.

tressed by dreaming, dreamed that, walking on the seashore, he picked up a book, which appeared to be the log-book of a ship of war of which his brother was captain. He opened it, and read an entry of the latitude, longitude, as well as the day and hour—to which was added, ‘our captain died.’ The company endeavoured to comfort him by laying a wager that the dream would be falsified by the event; and a memorandum was made in writing of what he had stated, *which was afterwards confirmed in every particular.*”

Case 2.* Written by the Hon. Mr Talbot. “In the year 1768, my father, Matthew Talbot, of Castle Talbot, County of Wexford, was much surprised at the recurrence of a dream three several times during the same night, which caused him to repeat the whole circumstances to his lady the following morning. He dreamed that he had arisen as usual and descended to his library, the morning being hazy. He then seated himself at his escritoir to write, when, happening to look up a long avenue of trees opposite the window, he perceived a man in a blue jacket, mounted on a white horse, coming towards the house. My father arose and opened the window. The man advancing, presented him with a roll of papers, and told him they were invoices of a vessel which had been wrecked, and had drifted in during

* “Health,” edited by Dr Sexton.

the night on his son-in-law's (Lord Mount Morris) estate, close by, and signed 'Bell & Stevenson.' My father's attention was only called to the dream from its frequent recurrence; but when he found himself seated at his desk on the misty morning, and beheld the identical person whom he had seen in his dream, in the blue coat, riding on a grey horse, he opened the window, and waited the man's approach. The man immediately rode up, and drawing from his pocket a packet of papers, gave them to my father, stating that they were invoices belonging to an American vessel which had been wrecked, and drifted in upon his lordship's estate, that there were no persons on board to lay claim to the wreck, but that the invoices were signed 'Bell & Stevenson.' I assure you, my dear sir, that the above is most faithfully given, and actually occurred. But it is not more extraordinary than other examples of the prophetic powers of the mind, or soul, in sleep, which I have heard related. —Yours most faithfully, WILLIAM, TALBOT. Alton Towers, Oct., 23, 1842."

Case 3.* "A young man, named John Gray, residing in Cinderford, who told his mother before he went to the Crump Meadows Coal Pits, at which he worked, that he dreamed the preceding night (Sunday, Jan. 4, 1844) that a large stone fell upon and killed him. The mother made light of the dream.

* Dr Binn's "Anatomy of Sleep."

Not so the dreamer, who went reluctantly to work, and not until he had returned twice to wish her 'good-bye.' The dream was fulfilled. An immense block of stone fell upon and crushed him to death."

Case 4.* "A clergyman had come to Edinburgh, from a short distance in the country, and was sleeping at an inn, when he dreamed of seeing a fire, and one of his children in the midst of it. He awoke with the impression, and instantly left town. On his return home, when he arrived within sight of his house, he found it on fire, and got there in time to assist in saving one of his children, who, in the alarm and confusion, had been left in a situation of danger."

Case 5. "A gentleman in Edinburgh was afflicted with aneurism in the popliteal artery, for which he was under the care of two eminent surgeons, and the day was fixed for the operation. The wife, two days previously, had dreamed that something had occurred which rendered the operation useless—the night of the dream the gentleman received a spontaneous cure."

Case 6. A lady dreamed that her black servant had murdered a female relative of her own. She became so impressed with her dream that on the following night she got a gentleman to watch in an adjoining room. At three in the morning the black appeared

* Abercrombie's "Intellectual Powers."

with a bucket of coals, and, on being questioned what he wanted there at that hour, stammered out something in a confused and hurried manner. On examining the contents of the bucket, the gentleman found a large knife."

Case 7.* Two sisters were in attendance upon their brother, who was ill of a common sore throat. "The sisters were sleeping in a room communicating with that of their brother's, when the elder of them awoke in a state of great agitation, and, having roused the other, told her that she had had a frightful dream. 'I dreamed,' said she, 'that Mary's watch stopped, and that when I told you of the circumstance, you said that much worse than that had happened, for ——'s breath had stopped,' naming their brother who was ill. To quiet her agitation, the younger sister immediately got up, and found the brother sleeping quietly, and the watch, which they had carefully put by in a drawer, going correctly. The following night the very same dream occurred, followed by similar agitation, which was again composed in the same manner, the brother being again found in a quiet sleep and the watch going well. On the following morning, soon after the family had breakfasted, one of the sisters was sitting by her brother, while the other was writing a note in the adjoining room. When her note was ready for being sealed, she was proceeding to take out for this pur-

* M'Nish's "Philosophy of Sleep."

pose the watch alluded to, which had been put by in her writing desk. She was astonished to find it had stopped; at the same time she heard a scream of intense distress from her sister in the other room—their brother, who had still been considered as going on favourably, had been seized with a sudden fit of suffocation, and had just breathed his last.”*

Case 8. “Miss M——, a young lady, a native of Ross-shire, was deeply in love with an officer, who accompanied Sir John Moore in the Peninsular War. The constant danger to which he was exposed had an evident effect upon her spirits, she became pale and melancholy in perpetually brooding over his fortunes, and in spite of all that reason could do, felt a certain conviction that when she last parted from her lover she had parted with him for ever. In vain was every scheme tried to dispel from her mind the awful thought—in vain were all the sights which opulence could command unfolded before her eyes. In the midst of pomp and gaiety, when music and laughter echoed around her, she walked as a pensive phantom, over whose head some dreadful and mysterious influence hung. She was brought by her affectionate parents to Edinburgh, and introduced into all the gaiety of that metropolis, but nothing

* Eugene Sue, the French novelist, has taken the full advantage of the sympathetic character of some dreams in his history of the twin sisters in the “Wandering Jew.”

could restore her, or banish from her mind the insupportable load which oppressed it. The song and the dance were tried in vain. They only aggravated her distress, and made the bitterness of despair the more poignant. In a surprisingly short period her graceful form declined into all the appalling characteristics of a fatal illness, and she seemed rapidly hastening to the grave, when a dream confirmed the horrors she had long anticipated, and gave the finishing stroke to her sorrows. One night, after falling asleep, she imagined she saw her lover, pale, bloody, and wounded in the breast, enter her apartment. He drew aside the curtains of the bed, and with a look of the utmost mildness, informed her that he had been slain in battle, desiring her at the same time to comfort herself and not take his death too seriously to heart. It is needless to say what influence this vision had upon a mind so replete with woe. It withered it entirely, and the unfortunate girl died a few days thereafter; but not before desiring her parents to note down the day of the month on which it happened, and see if it would be confirmed, as she confidently declared it would. Her anticipations were correct, for accounts were shortly after received that the young man was slain at the battle of Corunna, which was fought on the very day on the night of which his mistress had beheld the vision."

An architect in Glasgow told me, that when he

had difficult plans to draw, and was displeased with his efforts while in the normal state, he often went to bed to dream over the matter, when very satisfactory plans would enter his mind—and these plans have generally been accepted. He has thus several buildings erected, the plans of which were discovered while asleep. It is said of a great mathematician, that the problems that had baffled his numbers in the daytime were often clear at night; and of a politician, who saw clearly the bearings of events while asleep. Of course it would be easy for me to discourse for hours upon dreams which have been verified in the minutest particular, but I think it is uncalled for. The cases which I have selected will serve our purpose. Now, I assert that dreams will never be properly accounted for, if we are still to accept the hypotheses of the mind and brain adopted by the three schools of physiologists of our day. The parties in these dreams saw and heard as clearly while their senses (which, according to physiologists, are the only instructors of the brain) were shut, and more so than when they were open. Now, this is inexplicable. It is nothing short of nonsense to say that the parties only imagined that they saw and heard these things. They *did* see them as really as they ever saw any object, and that without the aid of the senses. Saying that it is the result of the imagination, is only evading the question, not answering it. And it is such evasions, combined with

a multitude of theories and explanations, which themselves stand equally in want of being explained, that have prevented us from having a philosophy of dreams. Psychologists have too readily fallen into the mire of popular theories, and thus they have thrown but little light on this mysterious subject. We ought to accept no theory, no matter who frames that theory, if it be not borne out with facts sufficient to establish it. It has often been objected that only one out of a hundred dreams is ever fulfilled. But I ask, whose fault is that? This question has not yet been answered. If it be the dreamers, then that fact upsets the purpose of the objection; and if it be not the dreamers, my question remains—Whose fault, then, is it? It is of no use telling us that dreams are the result of indigestion, or of the circulation of the blood being impeded, or of one organ being awake and another asleep;—these statements can never be established. Prophetic power is surely not the result of indigestion; and although many dreams appear to us as great nonsense, it by no means clears the difficulty of accounting for the lucidity and prophetic powers of others.

We will now examine a few cases of somnambulism, and draw from that abnormal condition a few arguments against the popular theories of mind and brain.

CHAPTER III.

SOMNAMBULISM—ILLUSTRATIVE CASES.

Case 1.* “**A**N English clergyman used to get up in the night, light his candle, write sermons, correct them with interlineations, and retire to bed again, being all the time asleep.”

Case 2.† “A miller used to get up at night, work at his usual vocation, and in the morning had no recollection whatever of his having done anything of the kind.”

Case 3. “A boy dreamed that he got out of bed, ascended to the summit of a dangerous precipice, robbed an eagle’s nest, and placed it in a certain place — all of which actually took place in presence of witnesses who beheld his perilous adventure.”

* Macnish.

† Gall.

Case 4. "Maria C——, during one paroxysm of somnambulism, recollected what took place in a previous one, without having any recollection during the interval of wakefulness. On one occasion her fellow-servant, a female of abandoned character, having found out that on awaking she entirely forgot everything which occurred during the fit, introduced, by stealth, into the house a young man of her acquaintance, and obtained for him an opportunity of treating Maria in the most brutal and treacherous manner. The wretches succeeded in their object by stopping her mouth with the bedclothes, by which and other means they overcame the vigorous resistance she was enabled to make to their villany even in her somnolent state. On awaking she had no consciousness whatever of the outrage; but some days afterwards, having fallen into the same state, it recurred to her memory, and she related to her mother all the revolting particulars."

Case 5. "An intelligent and well-educated young lady fell into a state of somnolency, and when she recovered she had lost all her previous knowledge—so much so, that she had again to learn her alphabet, &c. In these studies she was making some progress, when she was attacked by another fit, and all her lost knowledge was restored to her; but when she recovered from this second fit, it was discovered that she had no recollection of what had taken place, and her mind

returned to the same weak condition which followed the first attack. During four years and upwards she has had periodical transitions from one state to the other. Both the lady and her family are capable of conducting the affair without embarrassment. By simply knowing whether she is in the old or new state, they regulate the intercourse, and govern themselves accordingly."

Case 6.* "A servant girl was able to follow her usual calling during her somnolency. On one occasion she laid out the table correctly for breakfast, and repeatedly dressed herself and the children of the family, *her eyes remaining shut the whole time*. On another occasion she was taken to the church while under the attack, and there behaved with propriety, evidently attending to the preacher, and she was at one time so affected as to shed tears. In the interval she had no recollection of having been at church; but in the next paroxysm she gave a most distinct account of the sermon, and mentioned particularly that part of it by which she had been so much affected. She could sing incomparably better in the somnolent state than in her normal condition."

"A somnambulist used to rise, dress himself, go down to the wine-cellar, and draw wine from a cask. He appeared to see in the dark as well as in the light; but when he awoke either in the street or in the cellar,

* Edinburgh: Philosophical Transactions.

he was obliged to grope and feel his way back to his bed. The sense of touch did not guide the wanderer, because the moment it was returned to the mind he had to grope his way; whereas, in the somnolent state, he went direct. All the other senses are as perfectly closed as sight and feeling. A sleep-walker was found one night in the act of translating from Italian into French, and looking for words in a dictionary as usual, being asleep." We read also of a young gentleman who used to play cards while in this condition, and invariably win, owing, it is said, to his seeing what was in the hands of the other players; and one day, while in a dormant state, he announced that three persons, whom he named, were coming to see him. In an hour after, these three persons entered his room. Dr Sexton says: "In all these cases we think there is abundant evidence of the absence of external sensation, but that the mind perceives external relation in a certain degree there can be no doubt; and again, in many cases of somnambulism, the mind seems not to participate in the body." Sir William Hamilton says: "However astonishing, it is now proved beyond all rational doubt, that, in certain abnormal states of the nervous organism, perceptions are possible through other than the ordinary channels of sense." Dr Reid says: "No man can show it to be impossible to the Supreme Being to have given us the power of perceiving external objects without the organ." This will be all the more clearly seen as we proceed.

Somnambulism is still enwrapped in mystery—still an entangled skein. The theories that have been formed on this important subject are not worth a moment's notice. The subject never yet has been explained, and cannot, I believe, while men cling with incredible tenacity to theories that have neither facts nor good reasoning to bear them out. I will not here take notice of those interesting abnormal states—such as intoxication, daymare, nightmare, delirium tremens, &c.—but will pass on to cases of trance, wherein parties have to all appearance been dead, yet were not so, their minds being busy speculating on the scenes around them.

CHAPTER IV.

TRANCE AND CLAIRVOYANCE.

Case 1. **A** YOUNG lady fell into a deep trance, and was supposed to be dead. She was dressed in grave-clothes, laid in a coffin, and the day of her funeral fixed on. When that day arrived, and the parties assembled, drops of perspiration were observed on her forehead, then a slight motion of hands and feet. The lady then wakened up and uttered a most pitiable shriek. The description of her state of mind is most harrowing. She states that she was conscious of all that was going on. "The internal anguish of her mind was, however, at its utmost height when the funeral hymns began to be sung, and when the lid of the coffin was about to be nailed on. The thought that she was to be buried alive was the one that gave activity to her soul, and caused it to operate on her corporeal frame."

Case 2.* "A female, who was about to be buried

* Dr Duncan.

alive, heard the conversation of the persons present, endured the horrors of *seeing* her own body prepared for the grave—of being laid-out, and the toes tied together, and the chin and jaws enveloped in a bandage—but when her agony reached a certain height the spell was broken, she shouted, and was saved.”

These two cases are valuable to the psychologists, because in both the subjects retained their consciousness, and remembered all that took place in the room while they were in the trance state. There are, of course, hundreds of similar cases on record, but there are also instances of trance where the parties had no recollection whatever of what took place in their presence while in that condition. But these latter cases have a greater interest to the physiologists, because the patients are often without food and nourishment for a number of days at a time, and some even for many months, yet death did not always ensue. And it is a notorious fact, that a large number of men and women have been buried alive while in a trance state—the medical attendants and others confounding deep trance with death. I could mention some such cases, but I must refrain from doing so. With regard to the two cases here quoted, the whole physiological functions seemed suspended, yet the patients saw and heard—saw even when their eyes were closed—and their ears too, I should argue.

In fact, to all intents and purposes the body was dead, yet the mind was not impaired, and the emotions were as strong as in the normal state. I do not think that any received theory of mind and brain is sufficient to account for these facts, but it rather seems to me that these facts prove the insufficiency of all such theories. Under this head we may also speak of clairvoyance—another abnormal condition of the greatest possible interest. There are cases on record of clairvoyance which almost baffles our credence—yet the evidence of their truth is unquestionable. Take a case or two:—

Case 1. There is a curative mesmerist* in England who has a good clairvoyant in a young lady. This lady, while in a clairvoyant state, sees or perceives the seat of the diseases of the various patients who come to have a consultation, and the mesmerist directs his skill accordingly. If any one calls when the mesmerist is from home, and they know not where he is, the young lady is put into the trance, and while in that state she sees where he is, and then goes to apprise him of his being waited upon at home.

Case 2. A lady in Glasgow was deserted by her husband, and she had not the slightest idea where he

* This gentleman is not alone. There are, I believe, many others—our President among the rest—who likewise have good clairvoyants for a similar purpose.

had gone to. She consulted a clairvoyant, who not only informed her of the town wherein her husband resided, but also the street, the number in the street, the number of stairs up, and what he was engaged at. The lady at once set off to the place, and discovered her husband exactly situated as described by the clairvoyant. The clairvoyant, I may add, knew neither the lady nor her husband.

Case 3. Andrew Jackson Davis—who is certainly a great clairvoyant—has published several works relating what he has seen and done while in the trance state. A very remarkable case is mentioned in the “Philosophy of Death.” He states that while in the clairvoyant state he witnessed the severing of soul and body of an old lady whom he professionally attended. The description which he gives of the separation of soul and body is most novel and startling, and deserves serious consideration.

Case 4. Our President, J. W. Jackson, Esq., gave a very interesting case of a young lady in Edinburgh, who could not only see his thoughts, but tell him also of thoughts—which were yet in the bud, so to speak—that he would have by the time he travelled to Glasgow; and, as sure as she said it, the thoughts occurred to him.

In turning over the volumes of “Human Nature,”

“Zoist,” “Spiritual Magazine,” &c., we read of many cases of clairvoyants being useful in the recovering of stolen property, &c.

I take it, that the present received physiological theories of mind and brain are totally unable to give anything like a satisfactory explanation of this phenomena. The clairvoyants are not at one with their own explanations, so that these mysterious conditions are still a dark enigma to us, and they are likely to remain so, until men are willing to view facts unhampered by false theories and unphilosophical prejudices.

CHAPTER V.

MESMERISM—BRAIN-WAVES—MODERN SPIRITUALISM—
ABSTRACTION, &c.

MESMERISM is another strange condition of mind which seems to me to upset more physiological theories than one. How one man, by little else than an effort of will, can put another man's mind and will completely under his control, is surely something very wonderful, to say the least of it. And how that man, by a like effort, can make the other believe that he is in a garden full of beautiful flowers of the sweetest perfume—trees of the stateliest form, over-arched by an azure sky—permeated with fragrant breezes, balmy and invigorating. Or, perhaps, a passenger in a doomed ship, where the angry waves rise mountain high to fall upon the deck—the sky thundering out her dreadful voice, and deeply frowning amidst torrents of rain and terrific lightning flashes, and the pale, agitated countenances of seamen and passengers, give a death-

like appearance to all—the vessel fills—she sinks—swim for your lives—some attempt, while others utter their cry of despair, and sink. Now, the various emotions which such a scene would give rise to, the competent mesmerist could make his subject feel, though he was all the time in a back parlour; or make him plead, with an earnestness scarcely known in his normal condition, with some lady for a return of love—she is still obdurate—he still pleads, and pleads again—she yields, perhaps, and confesses her attachment to him—then the youth experiences the sweet emotions which such confession ever brings. You may make him fight, run, jump, swear, pray, preach, sing, buy, sell, work, &c., &c. In fact, there is almost no limit to the operator's power. The man who could leave such a subject as this unstudied has certainly neglected a very important branch of his education—important not only for its speculative and psychological value, but also for its more practical bearing—viz., its curative power. If physicians were to give mesmerism the same amount of study as they give to drugs, I am bound to say that less patients would die under their treatment. It is pretty generally understood that the more physicians there are, there are the more deaths; but mesmerism will ere long reverse the proverb, and give it its natural form—the more physicians, the less mortality. We may also bring under this head what is called the “Brain-wave

Theory." Now, in the first place, I object to the name, because I never heard, nor can I conceive of such (to me at least) an impossibility as a brain-wave. Perhaps the coiners of that term would themselves explain it. In its present shape I don't see how even a physiologist can adopt it. Let us have a case or two of this so-called brain-wave. It appears that the Poet-Laureate is *en rapport* with a lady, who seems to be conversant with a number of his movements. On one occasion he intended to visit the part of the country where this young lady resides, but before he proceeded very far he changed his mind and retraced his journey. The lady was perfectly aware of these movements without the possibility of any one informing her of the poet's intention. Robert Browning and several other gentlemen have also given us illustrations of this theory. The case of a clergyman—Rev. Mr Clay—is worthy of a place here. One very wet Sabbath afternoon his mother was anxiously awaiting the arrival of her husband, and while sitting thus she heard the yard door (a door which was ordered to be always kept shut) open, "and the person enter the house, traverse a passage at the basement storey, open the door at the foot of the back stairs, mount the stairs and enter the front hall. Here she assured herself that it was the footsteps of her husband. He put his umbrella into the stand with a rattling noise, took off his topcoat and shook it, and then came through the inner hall into

the dining-room. He then went up to the fire and rested his elbow on the mantelpiece, one foot on the fender, and stood there for a few minutes drying himself. At length his wife said to him, 'You must be very wet; had you not better go and change your clothes at once?' 'Yes; I think I had better do so,' and so he turned, left the room, and went upstairs to his dressing-room. As he did not return for some time, the lady went up to see what was keeping him, and, to her astonishment, he was not there, nor any signs of his having been there lately. She searched, but could not find him. She then thought it possible that he had went out again without her noticing him. She sat down very uneasy; but while she sat she heard again the same footsteps approaching, the same opening of the yard door, the same entrance by the back door, the same traversing of the passage downstairs and mounting by the back stairs into the hall, the same putting down of the umbrella and shaking of the coat, and then my father came into the room, walked up to the fire, and placed his elbow on the mantelpiece and foot on the fender, just as he had done before." The lady now asked where he had gone to. He answered that he had come home straight. The lady then told the story of his appearance. The husband instantly recollected that as he left the Goal the thought occurred to him, when he saw how heavy the rain was, that if he found the yard door unlocked he would go in that way—a thing which he very sel-

dom did—to avoid going round the corner to the front door; and, the thought having once occurred, he mentally rehearsed the circumstances of his entrance, doing in the spirit precisely what he afterwards did in the body. The writer adds: “The distance from the Goal to our home, ‘East Cliff,’ was rather more than two miles, and this corresponds with my mother—‘more than a half hour’ (the time which elapsed between his appearance in the spirit and his after-appearance in the body).” The writer further adds: “The conclusion is obvious: that while the *imago* of the yard door, back stairs, &c., was present in his brain, his *imago* was simultaneously present in my mother’s brain.” This is certainly a very remarkable case, and deserves much attention; but I should suggest the term “mind,” “spirit,” “psyche,” “geist,” or “soul,” as being more appropriate than “brain.” Another case, which also appeared in the *Spectator*:—A young man, who was very fond of the sea, prevailed upon his father to obtain for him a midshipman’s berth, which he did. One night while at sea, when his watch had expired, he asked his successor not to allow any one to pace over his head, as he felt very tired. This was promised; “but he was soon awakened by a steady footstep. He called out from his cabin why his orders had been disregarded; but, on being assured that no one had paced the deck, he again slept. A second time the same inquiry was made, and a like answer given. On the third occurrence of the mental disturbance,

he exclaimed, 'If it were possible, I should think that it was my *father's footsteps* which I have heard.' He made an entry in his log-book of the day and the hour of the occurrence, and when he reached home he learned that at the time his father lay dying, and his latest thoughts were filled with anxiety for his boy at sea." Emma Hardinge, while in London, contracted an engagement to lecture to a spiritual association at St Louis—a distance of some 5000 miles from London—the engagement being made by a "brain-wave;" or, as it has been more aptly termed, by "spirit telegraphy." Bacon says on this subject:—"Men who have looked deeply into the hidden nature of things—the transmission of one body to another, and the magnetic forces—have agreed that the human mind can be placed in communication with other minds, and transmit these impressions." Mason Gill, of Huddersfield, has had very numerous illustrations of this sympathetic theory, and it is to be hoped that all interested in psychology will collect as many such cases as possible, and carefully examine the evidence of their truth.

I would also disprove the popular theory of mind and brain from the facts of modern spiritualism. The facts brought forward by spiritualists are likely to create no greater a revolution in the physical than in the psychological world—and the sooner the better. If it upsets false theory, it is the herald of progress; and although it has its own theory, which we do not accept, yet its facts remain, and at our own peril

do we reject them. Now, several spiritualists assert that they have felt and been conscious of their spirits leaving the body—that their spirits have visited the circles of other spiritualists—that they can bring themselves *in rapport*, while in a trance, with the spirits of other men, and read their characters very minutely—that they have seen spirit forms when their organs of vision were shut—that they mix their paint, and paint, draw, &c., with their eyes closed—that they are often used as the physical instruments of other spirits who wish to communicate with us. They thus speak, write, &c., and are wholly unconscious of what they are doing while thus engaged. The truth of these statements has been frequently testified to and admitted by those who were themselves anti-spiritualists. I therefore argue that, as these men can perform such things without the aid of their senses—see, paint, draw, write, with their eyes closed, hear when the sense of hearing is shut, &c., and as the senses are the reflectors of external impressions on the brain—without them (to be logical) there can be no such impression—it must follow that the mind can see without the aid of the brain, and therefore the brain is *not* the organ of the mind. I cannot enter into spiritualism as I would like; but I am happy that its study is one of the objects of this Society, and I think that the more it is studied the more will the spiritualists be persuaded that the human spirit, under certain favourable condi-

tions, can see, &c., without the aid of any physical organ whatever. Under this head I could introduce *second sight*, but a very able paper on that subject has been already brought before your notice. *Reverie*, also, is prolific with arguments against the popular theory now under consideration; and *abstraction*, likewise, where men have eyes, and see not; ears, and hear not, &c., and their mind wholly absent from surrounding circumstances. Sir Isaac Newton, for instance, “when in a fit of absence, made a tobacco stopper of a lady’s finger. Archimedes remained unconscious and unmoved during the noise and slaughter of captured Syracuse. A priest in a fit of mental absence was unconscious of the pain of burning.” We read also of a gentleman—“While you fancy he is admiring a beautiful woman, it is an even wager that he is solving a proposition in Euclid; and while you may imagine that he is reading the Paris Gazette, it is far from being impossible that he is pulling down and rebuilding his country house.” Hogarth, the illustrious painter, paid a visit to the Lord Mayor in his new carriage. When the interview was over, he returned home on foot amid a drenching rain. He forgot that he had a carriage, or that that carriage had brought him to the Mayor’s. John Philip Kemble, the great actor, on the evening of the day of his marriage, left the theatre when the performance was over, returned to his lodgings, and retired to bed, absolutely forgetting

that he had been married that day, and that his wife was impatiently awaiting his return from the theatre. Professor Hamilton, of Aberdeen, was walking along the banks of the river Dee, when, to the horror of the many fish-women, who were awaiting the return of the boats, the Professor marched into the river. Assistance was procured and he was dragged out, still unconscious of what was going on. One of the women, in the simplicity of her heart, exclaimed, "Eh, sirce the day! they hae muckle tae answer for, that lat's you gang yer leen." Many other stories of a like nature could be told, but I think it unnecessary for my purpose. We have thus not only cases where men have seen and heard without the aid of the eyes and ears, but also where these senses were open, and the men neither heard nor saw. It may be objected that all that was necessary, in order to make these men see, &c., was attention. I ask, do we see by attention, or hear by attention? Is attention the function of any brain organ? Can attention create a function? To say that attention does this or that is merely an evasion of the question. Yet some men gather a smile of satisfaction over their countenances when they make such evasion, as if their ingenuity has finally answered the question. He is no philosopher who will not look at a question in all its phases, and answer it if he can. If he cannot, let him say so at once, without having recourse to the disingenuous subterfuge of evasion.

CHAPTER VI.

INSANITY AND SPECTRAL ILLUSIONS.

IT has often been argued that insanity is the result of brain disease, but, as we have seen, this assertion is without the most distant shadow of proof. Abercrombie, a very great authority on this subject, says, "attempts have been made to refer insanity to disease of bodily organs, but hitherto without much success. In some instances we are able to trace a connection of this kind, but in a large proportion we can trace no bodily disease." It is quite impossible to say with any safety whatever that insanity is the result of brain disease, because we have no means of proving this statement. Though the brain of an insane man was found to be diseased, it by no means follows that insanity was the result of such disease, for we have already seen a large number of cases where the brain was very extensively diseased, yet the person was thoroughly sane. Again, the insane, in their lucid moments,

assure us that they are possessed of spirits who have complete control over them. And even while the poor victims are conversing with you, they warn you of their approaching paroxysm, by stating that they see the spirit coming, and often describe to you its personal appearance. If you call in question their statement, they try all means to persuade you of its truth; and I think it very singular that so many of our insane believe so firmly in spirit-possession. We have no satisfactory reason to call in question their statement; in fact, if we *must* have a theory to explain the phenomena, I see no theory that can account for insanity like spirit-possession. What would seem to bear out this assertion, is the notorious fact that some men acquire a strength of intellect and clearness of perception, while insane, that they never manifested in their normal condition. This is a very significant fact. Take a few cases:—

Case 1. “A very beautiful and elegant young lady was afflicted with insanity. While in that condition she conversed aloud with imaginary persons, with her eyes open, and could not for about an hour be brought to attend to the stimuli of external objects by any kind of violence that it was possible to use. . . . These conversations were quite consistent, and we could understand what she supposed her imaginary companions to answer by the continuation of her part

of the discourse. Sometimes she was angry, at other times she showed much wit and vivacity, but was most frequently inclined to melancholy. While in this condition she sung with great accuracy, and repeated long quotations from the poets. These paroxysms generally terminated with the appearance of inexpressible surprise and great fear." This lady could never recollect a single idea of what had passed during her paroxysm.

Case 2 relates to a woman in the Hospital of La Salpetriere, in Paris. "Whenever she encounters the physician or any of the attendants, she bursts forth into an address, which is delivered with incredible rapidity and vehemence, and is generally an abusive or ironical declamation against the tyranny, cruelty, and injustice to which she is exposed. In the midst of her harangues, however, she introduces frequent and earnest parenthetical declarations, 'That she does not mean what she says; that though she vows vengeance, and showers imprecations on her medical attendant, she loves him and feels grateful for his kindness and forbearance; and that though anxious to evince her gratitude and obedience by silence, *she is constrained by an invisible agency to speak.*'"

Case 3. The insane man spoke constantly. We read that "sleep itself did not yield intermission; *and there was strong reason to believe that a part at least of his*

waking orations was delivered either without the cognisance of the other powers or without consciousness on the part of the speaker."

Case 4. "A young woman of the lower rank, aged nineteen, became insane. Before her insanity she had been only learning to read and to form a few letters; but during her insanity she taught herself to write perfectly, though all attempts of others to teach her failed, as she could not attend to any person that tried to do so. She has intervals of reason, which have frequently continued for three weeks, sometimes longer. During these she can neither read nor write; *but immediately on the return of her insanity, she recovers her power of writing, and can read perfectly."*

Case 5. "A gentleman said that he waited with great impatience for his attacks of insanity, because while in that state everything appeared so easy to him; no obstacles presented themselves either in theory or practice. *His memory acquired, all of a sudden, a singular degree of perfection.* Long passages of Latin authors occurred to his mind. In general he found great difficulty in rhythmical terminations, *but then he could write verses with as great facility as prose."*

Case 6. "Pinel often stopped at the chamber of a literary gentleman, who, during his paroxysms, appeared to soar above the mediocrity of intellect that

was familiar to him, solely to admire his newly-acquired powers of eloquence. He declaimed upon the subject of the Revolution with all the force, the dignity, and the purity of language that this very interesting subject could admit of. *At other times he was of very ordinary intellect."*

Case 7. This is a very strong one in favour of the spirit-possession theory. "A lady, who was liable to periodical paroxysms of delirium, which often attacked her so suddenly that in conversation she would stop in the middle of a story, or even of a sentence, and launch off into the subject of her hallucination. On the return of her reason, she would return to the conversation in which she was engaged at the time of the attack, beginning exactly where she had left off, though she had never alluded to it during the delirium; and, on the next attack of delirium, she would resume the subject of hallucination with which she had been occupied at the conclusion of the former paroxysm." We also read of a gentleman "who was infatuated with the chimera of perpetual motion, and who *constructed pieces of mechanism which were the result of the most profound combinations*, when he was so mad that he believed his head to have been changed." Also, of a female who sang with great sweetness and beauty, which she could *not* do when she was sane; and of a musician, who played much better when insane than when he was well.

I think that these cases tend to show that the mad-man's own theory is the better one, viz., that madness, or insanity, is the result of spirit-possession, not brain disease. We have, at least, testimony and some show of evidence in support of the former, but no good evidence in support of the latter theory. For my own part, I have no theory, I know none, nor can I conceive of any theory that could account for the various phenomena presented to us by insanity. The spirit theory, no doubt, apparently accounts for it. But the spirit theory itself stands equally in need of explanation, and is, perhaps, the greater mystery of the two. While this is no argument against it, yet, I consider, that we ought to be very cautious in our statements, or conjectures, on so vast a problem as insanity. However, I still maintain that insanity can never be accounted for by brain disease.

We proceed now, in the last place, to adduce some cases of spectral illusions in defence of our charges against the popular physiologists. Let us pay particular note to this very significant fact, that so little do these visions depend upon sight, that the blind are often subject to them, and they often appear at night when our physical eye is of little service to us. Let us state a few cases of these illusions :—

Case 1. A lady, residing in Petigny, in Belgium, had been troubled with spinal and other diseases for a number of years. Several medical men had given up

her case as hopeless, and for four years they had ceased to prescribe for her. And so thoroughly convinced was she that her dissolution was at hand, that she purchased the mourning cloth for her family. One night, when she was thoroughly resigned to her fate, a vision of a female appeared to the lady, and after stating who she was, &c., pronounced the invalid cured. And from that moment she regained her health, and has remained in the same state ever since. Hundreds of men and women, who knew the lady, have testified to the truth of the story. Indeed, a number of men went over from France to visit her, and all were thoroughly satisfied that the cure was instantaneous.

Case 2. "A well-authenticated story of an Irish lady of rank, who, having married a second time, was visited in the night-time by the spirit of her first husband, from whom she received a notification of the appointed period of her own death. The lady was at first terrified, but regained her courage. 'How shall I know to-morrow morning,' said she boldly to the spectre, 'that this is not a delusion of the senses, that I am indeed visited by a spirit?' 'Let this be a token unto thee for life,' said the visitant, and, grasping the arm of the lady for an instant, disappeared. In the morning a dark mark, as if of a fresh burn, was seen on the wrist, and the lady kept the scar covered over while she lived. *She died at the time prophesied.*"

Case 3. About three years ago, a servant girl in an extensive pastry shop in Glasgow, either dreamed, or some vision told her, that she would die at a certain date, and she died at the hour prophesied.

Case 4. A young lady, who was beloved by an officer in the army who had gone to the wars, after spending a very pleasant evening retired to her bedroom, but she had not been there many minutes when she beheld her lover standing at a short distance from her. She very sharply rebuked him for his treacherous conduct, and ordered him out of her presence. He remained stationary, looking upon his lady-love with a peculiarly sorrowful expression of countenance. The lady was inexorable; she insisted upon his departure, threatening at the same time to call up her mother. The lover still gazed, but moved not. The lady screamed out for her mother, who soon came up to her assistance, and found her daughter in a state of great excitement. On the old lady inquiring what was wrong, the daughter related to her what she had just witnessed—the sudden appearance of her lover, and his equally sudden departure. The young lady took it as a sign of his death. And she was right—for her lover had died that very night.

Case 5. Andrew Jackson Davis agreed with another gentleman, that whoever died first would come back and visit the survivor. The latter gentleman died soon after, and has often appeared since unto Mr Davis.

I do not know how to designate Emmanuel Swedenbourg's visitations. Were they spectral illusions? He professes to have conversed with thousands of the mighty dead. Swedenbourg was no weak-minded man, but a ripe scholar. Was he deceived? His deception must have been a mighty and continuous one. Nor do I know how to designate the appearance of Samuel unto Saul—the angel to the imprisoned apostle—the vision to Paul on his way to Damascus—the visions of Christ after his resurrection—the vision of Cæsar unto Brutus—the spirit attendant of Socrates—the strange career of Joan of Arc—the remarkable experiences of Madame von Krüdener, and a great number of men and women, such as D. D. Home, Jacob (the healer), the Davenports, Dr Newton, &c., who seem to be in daily *rapport* with intelligences of another sphere of existence than the earth one. I say that it is most difficult to account for any of these phenomena—nay, impossible, if we retain the popular theory of mind and brain. Indeed, I believe that the reception of this theory has caused many otherwise intelligent men to repudiate altogether these facts, because they could not be reconciled to their theory. Thus hastily formed theories are a barrier to progress.

These cases of “spectral illusions,” spiritual manifestations, or by whatever name you may choose to designate them, have taken place actually and really. They have been attested to by credible, trustworthy,

and competent witnesses; and, above all, these apparitions have prophesied, and their prophesies have seldom or never failed, so that the fact of their coming is beyond doubt. They can make themselves seen by us in spite of our senses. We see and hear them when the organs of these senses are shut. The mind, or spirit itself, can see, hear, &c., without their aid. Lord Bacon seems to have been conversant with this fact. He says—"It certainly is agreeable to reason that there are some light effluxions *from spirit to spirit*, when men are in presence one with another, as well as from body to body." It is often asked, "If we can see without our sense of sight, hear without our sense of hearing, &c., why are we possessed of these senses?" Men that would ask a question of that nature deserve no answer, neither would I give myself the least trouble to convince them of its truth. What we have to do with in the meantime, is the fact that, under certain conditions, we have functions without the aid of the reputed organs of those functions. This, I consider, I have proved, admitting, at the same time, that much can be said by my opponents against my position—indeed, we cannot retain a position on any subject without there being ample scope for controversy. But I must now draw my remarks to a conclusion, as I have already outstepped the usual bounds.

CHAPTER VII.

GENERAL SUMMARY—CONCLUSION.

LET us recapitulate. We have seen that physiology by no means bears out the materialists' theory, that the mind is the function of the brain, or that insanity is the result of brain disease, because men and women have been insane without any brain disease whatever, and the brain has been extensively diseased when no insanity resulted from such disease; that the materialist statement "that we have no conception of anything but matter and the properties of matter" is false (not only has he failed to prove his assertion, but the contrary has been proved: that our conception of mind is as clear as our conception of matter, and that mind is unimpaired and strong even when the bodily functions and operations have to all appearance ceased; furthermore, the statement that we have no conception of matter, &c., is absurd if it has any meaning, and if it has no meaning, why reiterate it?); and that well-attested messages from

the spirit spheres prove that we are dual beings possessed of soul and body, and that the former can exist without the latter, showing materialism to be a delusion which robs man of his immortal spirit, and the bright prospects which lie in wait for it in that "better land." We have also seen that the physiologists, who hold the brain to be the organ of the mind, had not sufficient facts nor legitimate deductions to support their theory; for the same physiological arguments that proved the mind to be no function of the brain, also disprove the assertion of this second school. We admitted that the most of the anatomists and physiologists believe that the brain is the organ of mind; yet few of them teach it to the students as an established fact. We showed that the mind operated without the recognised instructors of the brain; we also showed from the mind, in what is called its abnormal condition, that the senses of sight, hearing, &c., were intensified when their recognised physiological organs were shut; that spirit had intercourse with spirit without the aid of the physical organism; that the facts of brain-waves, modern spiritualism, and insanity, could not be explained on any theory recognising the brain as the organ of the mind; and that the arguments from phrenology were not to be too much relied upon, as the truth of phrenology itself is yet to be proved. Much, no doubt, can be said in favour of phrenology, and perhaps it has achieved some good purpose. We should, therefore, study it, but be ex-

tremely cautious in our deductions, and abstain from the very appearance of dogmatism.

We likewise saw that the school of physiologists headed by Mr G. H. Lewes confounded vitality with spirituality—two different forces; and the arguments adduced by these men, though apparently strong, were yet far from being conclusive. While they showed the unsatisfactoriness of the two former schools, they by no means established their own position. I admit that, did we not draw a distinction between mere physical life and spirit, we would find it almost impossible to disprove their theory on physiological grounds. Yet it is equally difficult for them to prove the truth of their theory, and the burden of proof lies with them. These men make a weak response to the psychological arguments urged against their theory. These they leave almost wholly untouched. We then showed that the brain could not be the organ of mind—first, from physiology; secondly, from psychology. We also saw the dangers of viewing facts by our pre-conceived theories (instead of viewing such theories by the light of well-attested facts), and of the unsatisfactory nature of all theories on this subject. Our duty is to observe the phenomena, and carefully weigh all the facts brought before us; and not until we have such an accumulation of facts as would guarantee us in forming a theory to account for them, should we attempt to form such a theory. Even then our theory should be

cautiously proclaimed, and subject to whatever emendations further facts would demand. O how I fear that man to be in the wrong track who has a theory for every fact! I cannot help thinking that he has a theory for none. I do hope that the members of this society have determined to examine the science of psychology in a fair and unbiassed manner—unhampered by the dust of ages in the shape of theories which have no foundation in fact, or facts that have been surreptitiously made to suit those theories. If such be their determination, success is possible—nay, probable; but if they still keep in the old path, move in the beaten track, which leads to nothing but strifes and endless speculations, then, alas! for the furtherance of this science—alas! for Psychology!

“There is nothing great on earth but man;
There is nothing great in man but mind.”

GLASGOW :

PRINTED AT THE CITY STEAM PRINTING WORKS, ANN STREET.

